

AMERICAN INSTRUCTORS OF THE DEAF

REPORT

OF THE

PROCEEDINGS OF THE TWENTY-THIRD MEETING OF THE CONVENTION OF AMERICAN INSTRUCTORS OF THE DEAF

HELD JUNE 25-30, 1923, AT BELLEVILLE
ONTARIO, CANADA



JANUARY 8, 1924.—Referred to the Committee on the District of Columbia
FEBRUARY 7, 1924.—Committee on the District of Columbia discharged, and referred
to the Committee on Printing

AMERICAN INSTRUCTORS OF THE DEAF

REPORT

PROCEEDINGS OF THE TWENTY-THIRD MEETING

OF THE AMERICAN INSTRUCTORS OF THE DEAF

SENATE RESOLUTION 152.

REPORTED BY MR. MOSES.

IN THE SENATE OF THE UNITED STATES,

February 13, 1924.

Resolved, That the report of the twenty-third meeting of the Convention of American Instructors of the Deaf be printed as a Senate document.

Attest:

GEORGE A. SANDERSON,
Secretary.

LETTER OF TRANSMITTAL

COLUMBIA INSTITUTION FOR THE DEAF,
Washington, D. C., January 3, 1924.

To the Congress of the United States:

In accordance with the act of incorporation of the Convention of American Instructors of the Deaf, approved January 26, 1897, I have the honor to submit the proceedings of the twenty-third meeting of the convention, held at Belleville, Ontario, June 25 to June 30, 1923, inclusive.

I have the honor to be, very respectfully, your obedient servant,

PERCIVAL HALL, *President.*

THE PRESIDENT OF THE SENATE.

THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

III

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LETTER OF SUBMITTAL.

MARYLAND STATE SCHOOL FOR THE DEAF,
Frederick, Md., November 15, 1923.

PERCIVAL HALL, Litt. D.,
President Columbia Institution for the Deaf,
Washington, D. C.

DEAR SIR: The act of incorporation of the Convention of American Instructors of the Deaf, approved January 26, 1897, requires a report to Congress, through the president of the Columbia Institution for the Deaf, Washington, D. C., "of such portions of its proceedings as its officers shall deem to be of general public interest and value concerning the education of the deaf."

Agreeably to the above request, I have the honor to submit herewith a full and complete report, containing such papers and addresses as might be of interest or of historic value, which were delivered at the twenty-second meeting of the convention held at Belleville, Ontario, Canada, July 25 to 30, 1923, inclusive.

May I respectfully request that this report be laid before Congress?

Very truly yours,

IGNATIUS BJORLEE, *Secretary.*

ACT OF INCORPORATION.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Edward M. Gallaudet, of Washington, in the District of Columbia; Francis D. Clarke, of Flint, in the State of Michigan; S. Tefft Walker, of Jacksonville, in the State of Illinois; James L. Smith, of Faribault, in the State of Minnesota; Sarah Fuller, of Boston, in the State of Massachusetts; David C. Dudley, of Colorado Springs, in the State of Colorado; and John R. Dobyms, of Jackson, in the State of Mississippi, officers and members of the Convention of American Instructors of the Deaf, and their associates and successors, be, and they are hereby, incorporated and made a body politic and corporate in the District of Columbia, by the name of the "Convention of American Instructors of the Deaf," for the promotion of the education of the deaf on the broadest, most advanced and practical lines, and by that name it may sue and be sued, plead and be impleaded, in any court of law or equity, and may use and have a common seal and change the same at pleasure.

SEC. 2. That the said corporation shall have the power to take and hold personal estate and such real estate as shall be necessary and proper for the promotion of the educational and benevolent purposes of said corporation, which shall not be divided among the members of the corporation, but shall descend to their successors for the promotion of the objects aforesaid.

SEC. 3. That said corporation shall have a constitution and regulations or by-laws and shall have the power to amend the same at pleasure: *Provided*, That such constitution and regulations or by-laws do not conflict with the laws of the United States or of any State.

SEC. 4. That said association may hold its meetings in such places as said incorporators shall determine, and shall report to Congress, through the president of the Columbia Institution for the Deaf and Dumb at Washington, District of Columbia, such portions of its proceedings and transactions as its officers shall deem to be of general public interest and value concerning the education of the deaf.

Approved, January 26, 1897.

OFFICERS OF THE CONVENTION OF AMERICAN INSTRUCTORS OF THE DEAF (1923, 1925), STANDING EXECUTIVE COMMITTEE, AND OTHER STANDING COMMITTEES.

OFFICERS.

President.—Dr. Newton F. Walker, Cedar Spring, S. C., superintendent of the South Carolina School for the Deaf and the Blind.

Vice president.—Elbert A. Gruver, Council Bluffs, Iowa, superintendent of the Iowa School for the Deaf.

Secretary.—Ignatius Bjorlee, Frederick, Md., superintendent and principal of the Maryland State School for the Deaf.

Treasurer.—Dr. J. Schuyler Long, Council Bluffs, Iowa, principal of the Iowa School for the Deaf.

DIRECTORS.

[The directors, with the officers, form the standing executive committee.]

J. W. Jones, Columbus, Ohio, superintendent of the Ohio State School for the Deaf.

Frank M. Driggs, Ogden, Utah, superintendent of the Utah School for the Deaf.

William A. Caldwell, Berkeley, Calif., principal of the California School for the Deaf.

STANDING COMMITTEES.

Normal section.—Frank M. Driggs, of Utah, chairman; Thomas S. McAloney, of Colorado; Mrs. Anna C. Hurd, of Rhode Island; E. L. LaCrosse, of New York; Miss Josephine F. Quinn, of Minnesota.

Oral section.—Miss Enfield Joiner, of North Carolina, chairman; Miss Mabel Kingsley Jones, of New York; Miss Catherine Ford, of Ontario; Miss Sophia K. Alcorn, of South Dakota; E. S. Tillinghast, of Missouri.

Auricular section.—Miss Jennie M. Henderson, of Massachusetts, chairman; Miss Gertrude Van Adestine, of Michigan; Miss Ida Gaarder, of the District of Columbia; Miss Elizabeth Van Ingen, of New York; Lyman Steed, of Pennsylvania.

Art section.—Miss Edith Jordan, of Illinois, chairman; Suzanne Lathrop, of Massachusetts; Dorothy Jones, of New York; Anne Carroll, of Washington; Henry Bruns, of Minnesota; Lois Taggart, of Missouri.

Kindergarten section.—Miss Eugenia T. Welsh, of Rhode Island, chairman; Miss Alice L. Crampton, of Iowa; Miss Gertrude Van Adestine, of Michigan; Miss Enfield Joiner, of North Carolina; Mrs. Fayette Peck Fox, of New York.

Industrial section.—J. Lewis Johnson, of New Jersey, chairman; Thomas S. McAloney, of Colorado; Howard McManaway, of Virginia; George B. Lloyd, of Washington; Harry S. Smith, of Utah; Tom L. Anderson, of Iowa; Henry S. Morris, of North Dakota; Mrs. Anne Lashbrook, of New York; Kelly H. Stevens, of New Jersey.

Eastern local section.—Arthur C. Manning, of Pennsylvania, chairman; Miss Edith M. Buell, of New York; Miss Musa Marbutt, of New Jersey; Miss Margaret Bodycomb, of Pennsylvania.

Southern local section.—Dr. Albert H. Walker, of Florida, chairman; Miss Frances K. Bell, of Louisiana; H. L. Tracy, of Mississippi; J. White Thomas, of Texas; Miss Enfield Joiner, of North Carolina.

Western local section.—Mr. Albert L. Brown, of Colorado, chairman; O. L. McIntire, of Oregon; Clarence J. Settles, of Idaho.

OFFICERS OF THE CONVENTION, 1920-1923.

President.—Dr. Percival Hall, Kendall Green, Washington, D. C., president of the Columbia Institution for the Deaf.

Vice president.—E. McK. Goodwin, Morganton, N. C., superintendent of the North Carolina State School for the Deaf.

Secretary.—Ignatius Bjorlee, Frederick, Md., superintendent and principal of the Maryland School for the Deaf.

Treasurer.—Dr. J. Schuyler Long, Council Bluffs, Iowa, teacher in the Iowa School for the Deaf.

DIRECTORS.

[The directors, with the officers, form the standing executive committee.]

Thomas C. Forrester, Rochester, N. Y., superintendent and principal of the Rochester School for the Deaf.

H. T. White, Jacksonville, Ill., superintendent of the Illinois School for the Deaf.

Dr. A. H. Walker, St. Augustine, Fla., president of the Florida School for the Deaf and the Blind.

ACTIVE MEMBERS.

LIFE MEMBERS.

Humbert, Mrs. L. A., Colorado Springs, Colo. Larson, L. M., Faribault, Minn.

MEMBERS.

Adams, Mabel E., 38 Percival Street, Dorchester, Mass.

Aloysia, Sister M., De Paul Institute, Pittsburgh, Pa.

Anderson, Elisabeth T., Frederick, Md.

Anderson, Tom L., Council Bluffs, Iowa.

Archer, Tunis V., Jacksonville, Ill.

Archer, Mrs. T. V., Jacksonville, Ill.

Atkinson, Mary, West Hartford, Conn.

Balis, Mrs. Sylvia Chapin, Belleville, Ontario.

Banerji, Salendra J., Calcutta, India.

Bateman, George, Halifax, Nova Scotia.

Berry, Amelia, Station M, New York, N. Y.

Betts, Otis A., Rome, N. Y.

Betts, Mrs. Otis A., Rome, N. Y.

Birck, Vernon, Fulton, Mo.

Bjorlee, Ignatius, Frederick, Md.

Blattner, J. W., Sulphur, Okla.

Bledsoe, John F., Overlea, Md.

Bosley, Magdelene, Brattleboro, Vt.

Booth, F. W., Omaha, Nebr.

Bradley, Gladys, Belleville, Ontario.

Brasel, Elbert C., Jacksonville, Ill.

Bright, Olga, Faribault, Minn.

Brill, Tobias, Trenton, N. J.

Brill, Mrs. Tobias, Trenton, N. J.

Brown, Alfred L., Colorado Springs, Colo.

Burke, Sister Mary Ann, S. D., Buffalo, N. Y.

Caldwell, William A., Berkeley, Calif.

Carter, Laura P., Staunton, Va.

Carter, Mary D., Macon, Ga.

Carter, Maud, Talladega, Ala.

Charles, C. W., 472 South Ohio Street, Columbus, Ohio.

Cleary, E. P., Jacksonville, Ill.

Cloud, J. H., 2606 Virginia Avenue, St. Louis, Mo.

Coleman, Grace D., Kendall Green, Washington, D. C.

Connery, Julia M., Central Institute, St. Louis, Mo.

Connor, Wesley O., Sante Fe, N. Mex.

Conrad, Gertrude, Vancouver, British Columbia.

Constantine, Joliette E., 1114 Newman Street, Indianapolis, Ind.

Corey, Mrs. Myrtle, Boulder, Mont.

Crampton, Alice, Council Bluffs, Iowa.

Croker, Gertrude W., 225 East Twenty-third Street, New York, N. Y.

Crouter, A. L. E., Mt. Airy, Philadelphia, Pa.

Cryder, Helen, I., Grand Rapids, Mich.

Cuthbert, Helen, 46 Home Street, Winnipeg, Manitoba.

Cuthbertson, E. Halifax, Nova Scotia.

Daly, Geraldine D., Mackay Institute, Montreal, Canada.

Daniel, Elizabeth, Jackson, Miss.

Davis, Amanda, Jacksonville, Ill.

Day, Herbert E., Kendall Green, Washington, D. C.

Deannard, Elizabeth, Belleville, Ontario.

Deem, Mary D., St. Louis, Mo.

DeMotte, Amelia, Jacksonville, Ill.

Denison, Charlotte E., Northampton, Mass.

Dobyns, J. R., Little Rock, Ark.

- Drew, Mrs. Mina P., 331 South Lafayette Avenue, Grand Rapids, Mich.
- Driggs, Burton, Devils Lake, N. Dak.
- Driggs, F. M., Ogden, Utah.
- Drury, M. E., Hartford, Conn.
- Dumon, Lucie, 1934 Delavan Avenue, Detroit, Mich.
- Eifler, Bertha, Jacksonville, Ill.
- Elliott, Edwina, Vancouver, British Columbia.
- Ely, Charles R., Kendall Green, Washington, D. C.
- Ely, Grace D., Kendall Green, Washington, D. C.
- Emerson, Grace M., Albany Home School, Albany, N. Y.
- d'Estrella, T. H., Berkeley, Calif.
- Eves, Lauretta W., Sch. Improved Inst., New York.
- Euritt, Guilford, Staunton, Va.
- Fay, E. A., Kendall Green, Washington, D. C.
- Fay, Helen B., Kendall Green, Washington, D. C.
- Fitzgerald, Edith, Baton Rouge, La.
- Ford, Catherine, Belleville, Ontario.
- Forrester, T. C., Rochester, N. Y.
- Foster, Dorothy, Brattleboro, Vt.
- Fraser, Miss M., Halifax, Nova Scotia.
- Fox, T. F., Station M., New York, N. Y.
- Fusfeld, Irving S., Kendall Green, Washington, D. C.
- Gaarder, Ida, Kendall Green, Washington, D. C.
- Gardner, Isaac, Station M., New York, N. Y.
- Gaudet, Brother H., Montreal, Canada.
- Gilbert, I. B., Flint, Mich.
- Gilder, Marie, Gibson, Ohio.
- Gollmar, Mae, Swissvale post office, Pittsburgh, Pa.
- Goltra, Gertrude, 1008 West State Street, Jacksonville, Ill.
- Goodwin, E. McK., Morganton, N. C.
- Gray, Mabel, Northampton, Mass.
- Granger, Audria, Olathe, Kans.
- Greener, A. B., Columbus, Ohio.
- Griffin, Mary, Colorado Springs, Colo.
- Gruver, E. A., Council Bluffs, Iowa.
- Hall, Percival, Kendall Green, Washington, D. C.
- Hamilton, Ida C., Boulder, Mont.
- Harner, Zella, Fulton, Mo.
- Harris, James C., Cave Spring, Ga.
- Haugberg, Margaret, Little Rock, Ark.
- Haycock, J. Sibley, 6 Kensington Park Gardens, London, England.
- Henderson, Jennie M., 57 Birch Street, Roslindale, Mass.
- Herdman, Pearl, 3425 Henrietta Street, St. Louis, Mo.
- Hisey, Nora, Toledo Day School, Toledo, Ohio.
- Hodgson, E. A., Station M., New York, N. Y.
- Hubbard, Mabel, Talladega, Ala.
- Hughes, Peter, Fulton, Mo.
- Hurd, Mrs. Anna, Providence, R. I.
- Ingle, Helen F., Swissvale post office, Pittsburgh, Pa.
- Ingle, Truman, Swissvale post office, Pittsburgh, Pa.
- James, Ada, Belleville, Ontario.
- Jenkins, Mrs. J. H., Talladega, Ala.
- Johnson, J. L., Trenton, N. J.
- Jones, Carrie, Columbus, Ohio.
- Jones, J. W., Columbus, Ohio.
- Jones, Lois, Hartford, Conn.
- Jordan, Edith, Jacksonville, Ill.
- Keller, M. H., Romney, W. Va.
- Kent, Mrs. Vida B., Erie Day School, Erie, Pa.
- Kepler, M. Adele, 1421 Southwest Street, Jacksonville, Ill.
- Kingsley, Anna M., 239 Webster Avenue, Jacksonville, Ill.
- LaCrosse, Edwin, Wright School, New York, N. Y.
- Lally, E. B., Belleville, Ontario.
- Lawrence, S. H., Vancouver, British Columbia.
- Leonard, Bessie, N., Clarke School, Northampton, Mass.
- Lewin, Lucie M., Staunton, Va.
- Loar, Florence, Jacksonville, Ill.
- Long, J. Schuyler, Council Bluffs, Iowa.
- Macomber, Mariana, Northampton, Mass.
- Malahan, Ruby, Trenton, N. J.
- Manning, A. C., Pittsburgh, Pa.
- Manning, F. H., Talladega, Ala.
- Marbut, Musa, Trenton, N. J.
- Marsh, Rose, Columbus, Ohio.
- Marshall, Mabel, Faribault, Minn.
- Martin, Henry I., Canton, Ohio.
- Matteson, Edith L., Delavan, Wis.
- McAloney, Thomas S., Colorado Springs, Colo.
- McAndrew, Frances, 1767 Jefferson Avenue, Scranton, Pa.
- McClure, Mrs. William C., Fulton, Mo.
- McDaniell, Nettie, Cave Spring, Ga.
- McDonald, Charles E., 1545 St. Paul Street, Rochester, N. Y.
- McKeen, Frances, Northampton, Mass.
- McLaughlin, Clayton, Rochester, N. Y.
- McLean, M. A., Halifax, Nova Scotia.
- McLeod, Ida, Mackay Institute, Montreal, Canada.
- Menzemer, H. J., Boulder, Mont.
- Miller, Ada, Cedar Spring, S. C.
- Moore, Mrs. S. M., St. Augustine, Fla.
- Murray, Marion L., School for Improved Instruction, New York, N. Y.
- Myers, Christie E., Hartford, Conn.
- Numbers, May E., Northampton, Mass.
- Norton, Carrie B., 502 Washington Street, Traverse City, Mich.
- O'Hara, Juanita I., Westchester, N. Y.
- O'Donnell, Francis, Berkeley, Calif.
- Orr, Clara, 709 Corbin Terrace, Kansas City, Mo.

- Orr, Della, Jacksonville, Ill.
 Orr, Emma L., 709 Corbin Terrace,
 Kansas City, Mo.
 Pittinger, O. M., Indianapolis, Ind.
 Pollard, Nannie A., Faribault, Minn.
 Poore, Mrs. H. T., Knoxville, Tenn.
 Porter, George, Trenton, N. J.
 Proctor, Maggie N., Danville, Ky.
 Putnam, George, Jacksonville, Ill.
 Quinn, Josephine, Faribault, Minn.
 Robb, Miss A. M., Halifax, Nova
 Scotia.
 Rodwell, Thomas, Winnipeg, Mani-
 toba.
 Rogers, Augustus, Danville, Ky.
 Roper, Anna C., 518 South Theresa
 Street, St. Louis, Mo.
 Ross, Marian, Staunton, Va.
 Russell, Catherine, 222 Park Street,
 Jacksonville, Ill.
 Russell, Clara, Belleville, Ontario.
 Russell, Margaret, 222 Park Street,
 Jacksonville, Ill.
 Schoneman, Fred W., Jacksonville, Ill.
 Scott, Wirt, Jackson, Miss.
 Scott, Mrs. Wirt, Jackson, Miss.
 Sensenig, Barton, 201 West Mount
 Pleasant Avenue, Philadelphia, Pa.
 Settles, Clarence, Gooding, Idaho.
 Sims, Ruth, Talladega, Ala.
 Slattery, Helen M., 1042 Sass Avenue,
 Grand Rapids, Mich.
 Smith, Rebecca, Frederick, Md.
 Smith, Verne, Belleville, Ont.
 Smith, Miss Vina, Delavan, Wis.
 Smith, Wanita, Frederick, Md.
 Sollberger, Emma, Jacksonville, Ill.
 Stafford, Eva, Sioux Falls, S. Dak.
 Stafford, Julia, Sioux Falls, S. Dak.
 Steed, Lyman, Mount Airy, Phila-
 delphia, Pa.
 Steidemann, Clara, 4110 North
 Eleventh Street, St. Louis, Mo.
 Stevenson, E. A., Danville, Ky.
 Stevenson, Mrs. E. A., Danville, Ky.
 Stewart, G. F., Belleville, Ontario.
 Stirk, Harriet A., Belleville, Ontario.
 Taft, Carolyn, 844 West College
 Avenue, Jacksonville, Ill.
 Tate, J. N., Faribault, Minn.
 Taylor, Elizabeth, Portland, Me.
 Taylor, Harris, Lexington Avenue, New
 York, N. Y.
 Taylor, Nellie, Fulton, Mo.
 Teegarden, Alice, Station M, New
 York, N. Y.
 Thompson, H. E., Trenton, N. J.
 Throckmorton, Helen, Rome N. Y.
 Tillinghast E. S. Fulton Mo.
 Tillotson, Ivy M., West Hartford,
 Conn.
 Tilly, Vivian, Northampton, Mass.
 Timberlake, Josephine, Volta Bureau,
 Washington, D. C.
 Tracy, H. L., Jackson, Miss.
 Travis, J. E., Indianapolis, Ind.
 Tucker, Walter, Mystic, Conn.
 Tucker, Mrs. Walter, Mystic, Conn.
 Turriff, Lily J., Winnipeg, Manitoba.
 Underhill, O. W., St. Augustine, Fla.
 Van Adestine, Gertrude, 1930 Mar-
 quette Street, Detroit, Mich.
 Van Benschoten, Irene, Kansas City,
 Mo.
 Van Ingen, Elizabeth, Rochester, N. Y.
 Vincent, Elizabeth, Jacksonville, Ill.
 Vinette, Sister M., Buffalo, N. Y.
 Walker, A. H., St. Augustine, Fla.
 Walker, Laurens, Cedar Spring, S. C.
 Walker, N. F., Cedar Spring, S. C.
 Weaver, J. M., Brattleboro, Vt.
 Welsh, Eugenia, Providence, R. I.
 Welty, Harry L., Sioux Falls, S. Dak.
 Werner, Ella Scott, Beverly, Mass.
 Westfall, Irene, Rochester, N. Y.
 Wetherill, Stella, Baton Rouge, La.
 Wheeler, F. R., Hartford, Conn.
 Whildin, Mabel, Washington, D. C.
 Whildin, Olive, Rochester, N. Y.
 Wilcoxson, Florence, Council Bluffs,
 Iowa.
 Williams, Eva, Jacksonville, Ill.
 Williams, Katherine, Delavan, Wis.
 Williams, Mary, Delavan, Wis.
 Winston, Maytie E., 1 Mount Morris
 Park West, New York.
 Yale, Caroline A., Northampton, Mass.
 Zorn, W. H., 922 Studer Street, Colum-
 bus, Ohio.

HONORARY MEMBERS.

- Anderson, Miss Matilda, Glasgow,
 Scotland.
 Baker, Miss D. E., Birmingham, Eng-
 land.
 Bateman, Mrs. George, Halifax, Nova
 Scotia.
 Bawden, Miss Kate, Belleville, Ontario.
 Bjorlee, Mrs. Ignatius, Frederick, Md.
 Collister, T. W., Belleville, Ontario.
 Colquhoun, Dr. A. H. U., Toronto,
 Ontario.
 Croghan, Miss Amy, London, England.
 Dobyns, Mrs. J. R., Little Rock, Ark.
 Driggs, Mrs. Burton, Devils Lake,
 N. Dak.
 Falconer, Sir Robert, Toronto, Ontario.
 Forrester, Mrs. T. C., Rochester, N. Y.
 Gemmill, W. H., Des Moines, Iowa.
 Gilmour, E., Montreal, Quebec.
 Henderson, Miss Barbara, Birming-
 ham, England.
 Herety, J. O., Belleville, Ontario.
 Houston, Dr. J. A., Toronto, Ontario.
 Johnson, Mrs. J. L., Trenton, N. J.
 Jones, Mrs. J. W., Columbus, Ohio.
 Kawamota, U., Japan.
 LaCrosse, Mrs. Edwin, New York.
 Love, Dr. James Kerr, Glasgow, Scot-
 land.
 Manning, Mrs. F. H., Talladega, Ala.

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| Myers, Miss Sarah, Boston Spa, England. | Robertson, McKenzie, Belleville, Ontario. |
| Pearce, Miss Elizabeth, Belleville, Ontario. | Scott, Oswald, Belleville, Ontario. |
| Pearce, J. W., Belleville, Ontario. | Shackley, Mrs. Myrtle, Baltimore, Md. |
| Ponton, Col. W. N., Belleville, Ontario. | Smith, Howard, Cincinnati, Ohio. |
| Rodwell, Mrs. Thomas, Winnipeg, Manitoba. | Smith, Mrs. Howard, Cincinnati, Ohio. |
| Pittinger, Mrs. O. M., Indianapolis, Ind. | Willoughby, Miss E. A., Belleville, Ontario. |
| Poore, H., Knoxville, Tenn. | Wilson, Father E., Boston Spa, England. |
| | Walker, Mrs. A. H., St. Augustine, Fla. |

THE
JOURNAL
OF
THE
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MEDICAL ASSOCIATION
PUBLISHED WEEKLY
CHICAGO, ILL., U.S.A.
1914

CONSTITUTION OF THE CONVENTION OF AMERICAN INSTRUCTORS OF THE DEAF.

ARTICLE I.—*Name.*

This association shall be called the Convention of American Instructors of the Deaf.

ARTICLE II.—*Objects.*

The objects of this association shall be:

First. To secure the harmonious union, in one organization, of all persons actually engaged in educating the deaf in America.

Second. To provide for general and local meetings of such persons from time to time, with a view of affording opportunities for a free interchange of views concerning methods and means of educating the deaf.

Third. To promote, by the publication of reports, essays, and other writings, the education of the deaf on the broadest, most advanced, and practical lines, in harmony with the sentiments and practice suggested by the following preamble and resolutions unanimously adopted by the convention in 1886 at a meeting held in Berkeley, Calif.:

"Whereas the experience of many years in the instruction of the deaf has plainly shown that among the members of this class of persons great differences exist in mental and physical conditions and in capacity for improvement, making results easily possible in certain cases which are practically and sometimes actually unattainable in others, these differences suggesting widely different treatment with different individuals: It is therefore

"*Resolved*, That the system of instruction existing at present in America commends itself to the world, for the reason that its tendency is to include all known methods and expedients which have been found to be of value in the education of the deaf, while it allows diversity and independence of action and work at the same time, harmoniously, aiming at the attainment of an object common to all.

"*Resolved*, That earnest and persistent endeavors should be made in every school for the deaf to teach every pupil to speak and read from the lips, and that such efforts should be abandoned only when it is plainly evident that the measure of success attained does not justify the necessary amount of labor: *Provided*, That the children who are given to articulation teachers for trial should be given to teachers who are trained for the work, and not to novices, before saying that it is a failure: *And provided*, That a general test be made and that those who are found to have sufficient hearing to distinguish sounds shall be instructed aurally."

Fourth. As an association to stand committed to no particular theory, method, or system, and adopting as its guide the following motto: "Any method for good results; all methods, and wedded to none."

ARTICLE III.—*Members.*

SECTION 1. All persons actively engaged in the education of the deaf may enjoy all the rights and privileges of membership in the association on payment of the prescribed fees and agreeing to this constitution.

SEC. 2. Eligibility of applicants is to be determined by the standing executive committee and reported to the convention.

SEC. 3. Any person may become an honorary member of the association, enjoying all the rights and privileges of membership, except those of voting and holding office, on being elected by vote of the association.

SEC. 4. Each person joining the association shall pay a fee of \$3 for the first year and \$1 annually thereafter.

SEC. 5. There shall be in addition a registration fee of \$1 for each person registered at each regular meeting.

10 CONVENTION OF AMERICAN INSTRUCTORS OF THE DEAF.

SEC. 6. Any member of the association desiring to commute the annual dues into single payment for life shall be constituted a life member on the payment of \$20.

SEC. 7. Applications for membership must be made to the treasurer, who will receive all membership fees and dues. All privileges of membership are forfeited by the nonpayment of dues.

ARTICLE IV.—Officers.

SECTION 1. At each general meeting of the association there shall be elected by ballot a president, vice president, secretary, treasurer, and three directors, these seven persons forming the standing executive committee of the convention. They shall continue in office until their successors are elected, and shall have power to fill vacancies occurring in their body between general meetings.

SEC. 2. There shall also be elected by ballot at each general meeting of the association nine chairmen of committees, as follows: One for a normal section, one for an industrial section, one for an oral section, one for an art section, one for an auricular section, one for a kindergarten section, one for an eastern local committee, one for a western local committee, and one for a southern local committee. Before the adjournment of each general meeting, or immediately thereafter, the standing executive committee and the nine elected committee chairmen, acting together, shall elect four persons to membership in each of the nine committees herein provided for.

SEC. 3. The general management of the affairs of the association shall be in the hands of the standing executive committee, subject to the provisions of such by-laws as the association shall see fit to adopt.

SEC. 4. All officers and members of committees must be active members of the association in regular standing.

SEC. 5. The standing executive committee shall make a full report at each general meeting of all the operations of the association, including receipts and disbursements of funds, since the preceding meeting.

ARTICLE V.—Meetings.

SECTION 1. General meetings of the association shall be held biennially, but the standing executive committee may call other general meetings at their discretion.

SEC. 2. Local meetings may be convened as the standing executive committee and the committees on local meetings shall determine.

SEC. 3. Proxies shall not be used at any meeting of the association, but they may be used in committee meetings.

SEC. 4. Notice of general meetings shall be given at least four months in advance and notice of local meetings at least two months in advance.

SEC. 5. The business of the association shall be transacted only at general meetings, and at such meetings 100 voting members of the association must be present to constitute a quorum.

ARTICLE VI.

In the first election of officers held under the provisions of this constitution, said election occurring immediately after its adoption, all duly accredited active members of the Fourteenth Convention of American Instructors of the Deaf shall be entitled to vote, said members making payment of their membership fees to the treasurer at the earliest practicable opportunity after he shall have been elected.

ARTICLE VII.—Amendments.

This constitution may be amended by an affirmative vote of two-thirds of the members present at any general meeting of the association: *Provided*, That at such meeting at least 150 voting members of the association shall be present.

ARTICLE VIII.

Devises and bequests may be worded as follows: "I give, devise, and bequeath to the Convention of American Instructors of the Deaf, for the promotion of the cause of the education of the deaf, in such manner as the standing executive committee thereof may direct," etc.; and if there be any conditions, add "subject only to the following conditions, to wit: —."

TWENTY-THIRD MEETING OF THE CONVENTION OF AMERICAN INSTRUCTORS OF THE DEAF.

BELLEVILLE, ONTARIO, CANADA, JUNE 25-30, 1923.

FIRST DAY, MONDAY, JUNE 25, 1923.

PROGRAM:

Afternoon:

Registration, in charge of Dr. J. Schuyler Long. Registration fee, \$1. All who take advantage of the low rate of board offered by the Belleville School are expected to become members of the convention.

8 p. m.:

General meeting, Dr. Percival Hall presiding.

Prayer: Dr. J. R. Dobyns, Little Rock, Ark.

Addresses of welcome: Hon. J. A. Houston, Toronto, high school inspector; Mr. Mackenzie Robertson, Belleville, president of the chamber of commerce; Mr. Oswald H. Scott, Belleville, president of the Rotarians; Mr. Thomas Collister, Belleville, representing the Kiwanis Club; Dr. C. B. Coughlin, superintendent of the Ontario School for the Deaf; Col. William N. Ponton, Belleville.

Responses: Mr. George S. Haycock, London, England, representing foreign delegates; Dr. J. R. Dobyns, superintendent of the Arkansas School for the Deaf.

Address of the president of the convention, Dr. Percival Hall, Washington, D. C.

Announcements: Mr. George Stewart, of the Ontario School for the Deaf.

EVENING SESSION.

The convention was called to order at 8.30 o'clock p. m. in the administration building, Ontario School for the Deaf, by Dr. Percival Hall, president of Gallaudet College, Washington, D. C.

Doctor HALL. It is my pleasure and privilege this evening to call to order the twenty-third meeting of the Convention of American Instructors of the Deaf. I will ask Doctor Dobyns to open our meeting with prayer.

(Prayer by Dr. J. R. Dobyns, of the Arkansas School for the Deaf.)

It is now my pleasure to introduce to you Mr. J. A. Houston, representing the Government of Canada and the department of education in particular, who will welcome us here this evening.

**ADDRESS OF HON. J. A. HOUSTON, HIGH SCHOOL INSPECTOR,
TORONTO, ONTARIO.**

Mr. HOUSTON. Mr. President, ladies and gentlemen, you see before you to-night the victim of an oversupply of good nature. It may seem a strange thing to say, but I thoroughly regret finding myself in the position which I now occupy. Talk about the unexpected sometimes happening; if the unexpected has ever happened in my

life, it is in my finding myself having the honor of being here in front of you to-night.

When the date was fixed for holding this convention in Belleville I don't suppose anyone had the slightest idea that the date which would see you gathering here would see this Province winding up one of the hottest election fights that we have had for many a day.

On the program as sent to you it was announced that his honor the Lieutenant Governor of the Province of Ontario would be here to welcome you, and also the honorable the minister of education. Now I need scarcely say that under the circumstances it is hardly to be expected that either one or the other of them could be able to be with us, and some victim had to be found. You see the victim before you. [Laughter.]

A pleasure it is to me in many, many ways, a very great pleasure and a very great privilege I feel it, too, to have had the opportunity of meeting even as many of you as I have had the pleasure of meeting here this afternoon; at the same time you can quite understand my feelings when I think of the responsibility which rests upon me and whom and what I have the honor to represent here to-night.

His honor the lieutenant governor was disappointed, I may say, personally, at not being present with you, and I have received from his secretary a letter which I have been asked to read to you. This part of my work is not at all difficult. [Reading:]

TORONTO, June 23, 1923.

His honor the lieutenant governor desires me to express his regret that on account of circumstances which have unexpectedly arisen he will be unable to visit Belleville on Monday the 25th instant, to welcome in the name of the Province of Ontario the delegates who will meet at the Twenty-third Convention of American Instructors of the Deaf.

He will feel obliged if you will convey this information to the convention and also his sincere hope that the meeting will have every possible success.

His honor is not unaware of the great work which is being carried on by trained teachers who devote so much of their lives to the amelioration of conditions in their special field of labor. His honor would express the hope that the interchange of ideas, supported by the actual experience of those engaged in the work who are assembled at Belleville, will be stimulating and fruitful of good results.

ALEX FRASER, *Secretary.*

The Hon. R. H. Grant, minister of education for the Province of Ontario—I can speak very personally with regard to Mr. Grant, with whom I have had the closest possible intercourse for the last four years, during which he has occupied the position which he is now filling so admirably—Mr. Grant I know regrets very very much that he is not able to be with you to-night. I know of no one who would have been more pleased to welcome you than he, especially as he takes a very great personal interest in the advancement of education, shall I say along the lines in which most of you are engaged? It is his firm belief—and he has tried to carry that out as far as he possibly could all through his career as minister of education—that equal opportunity should be given to every child. One of his great aims has been to carry secondary education to the door, as he has said, of every farmhouse in the Province, and he has done a great deal toward it. So you can see how interested he would be in the work in which you are engaged, that of helping those who are to a certain extent handicapped in their efforts, to carry on their work and to take their place in the world. It would have been a very great

pleasure to him to have been with you, but as I intimated a few moments ago, I am told he is having the fight of his life to retain his seat in the house, and I am looking forward with quite a bit of interest as to what the returns to-morrow morning may show with regard to his success. You can quite understand that although officially he may be with you, personally, I think you may assume, he will probably be listening to election returns to-night from all quarters of his county.

I have then the honor and the privilege of extending to you on behalf of the honorable the minister of education an official welcome to this Province of Ontario and to one of its most beautiful cities. The very name itself tells you what it is, and the name is right. I hope you will judge all of your visits to the cities of Ontario by the city of Belleville, so far as beauty is concerned and so far as welcome is concerned too.

I have the pleasure of having also to give to you a direct message from Mr. Grant, because when he was not here in person he thought it would be only fair that he should at least give you a word to show that while he may seem to be forgetting you at the present moment, you were in his mind a very great deal during the week past. This is what he says:

PERSONAL MESSAGE FROM THE MINISTER OF EDUCATION.

Nothing but important public duty at this time prevents me from going to Belleville and welcoming the convention of the American Association of Teachers of the Deaf, who meet in this Province by invitation. I desire you to convey to them my heartiest good wishes and to assure them that the work they do is highly appreciated wherever the instruction of deaf children forms part of the educational duty of the State. We, in Ontario, have profited greatly by the splendid work of Doctor Coughlin and his staff of teachers, whose labors are justly admired throughout Canada. In the new buildings, which our visitors have an opportunity of inspecting, and which have been completed since I became minister of education, will be found the symbol of Ontario's tribute to the importance of the work of training the deaf. Please also convey to the president and members of the association the Government's acknowledgment for selecting Belleville as their place of meeting, and accept the assurance of our hope that their meeting will be in every way pleasant and successful.

R. H. GRANT.

JUNE 23, 1923.

It might be interesting for a moment to look back at the general development that has taken place along certain lines in the last few hundred years (don't get scared; I am not going to carry you very far back) leading up to the work in which you ladies and gentlemen are now engaged.

There was a time in the history of humanity, and especially in the history of the Anglo-Saxon race, when civil and religious liberty were almost unknown; when autocracy was the order of the day; when the people were governed not by themselves but by others, and I need not tell you of the long struggle which took place in order that citizens might gain their civil rights, gain the right of self-government, gain the right of responsible government. But success crowned their efforts, and we to-day are living under—I suppose when I say “we” I may include you with us on this side of the line—we are living under what we consider the freest form of government to be found to-day on the face of the earth, where the people govern themselves through

themselves, for themselves, and by themselves. These things were not gained without many and many a struggle.

Civil rights, the right of responsible government we have gained. We are living under the benefits of it now. We are feeling the benefits of it. We are what we call a democracy. I hope the word has not been played too far.

Then came the next step in the struggle when the ladies (God bless them) said it was time that they had their rights, and we know the struggle that went on for a good many years as to women's rights. They too succeeded, and to-day are as good as we are, plus. [Applause.] And if you will pardon me, I think in that very regard we are looking forward with considerable interest to what to-morrow will tell us as to the women's vote in this Province of Ontario to-day. There is a great deal hinging on it. I don't know how it is in the States from which you severally come, but I do know that we have in the Province of Ontario to-day more women voters than men voters, and you see they can do as they like with us, and we are looking forward with a very great deal of interest to what may be the outcome of to-day's voting. But they have their rights, and I sincerely hope, and I know, that it will do the country good.

The change, giving the franchise to the women, is a change which did not come any too soon, because—and I say it without any flattery—we may bank on them being on the side of the right every time. [Applause.] Anything for the elevation of the masses, anything for the betterment of the people, will find the support of the women.

Passing on, the struggle for women's rights came and was fought out and they won. To-day we are in the middle of another struggle, the struggle for children's rights. It has been going on step by step for a number of years, I will grant, but we find instances even to-day of children being exploited and children being neglected and children being I don't know what, but children's rights are coming to the front to-day as perhaps they never came before.

I like to think of what I call the children's charter of rights. There are four articles in that charter which I would demand, and which I think the world at large is seeing to-day should be granted.

First—perhaps you may not all agree with me in this—I claim that children have the right to be well born. That is perhaps an open question, and it is a question that politicians are fighting shy of. It is a question which social economists are studying. It is a question which is being taken up in a great many different places, but is being handled with gloves—this question of eugenics, as to how far the State is justified in interfering with matters of that kind. But, ladies and gentlemen, I think that the State in self-defense, if for no other reason, should do something, take some part in producing conditions which will bring about that state in which the children will be well born; that is, with healthy surroundings—I need not go into details; medical inspection—I don't know what all it does mean, but it is worth while studying. It is being studied in many places to-day, and I think it is well worth studying.

Next to the right to be well born, I claim, is the right for children to have suitable environment, suitable surroundings in which to grow and live and have their being. This is universally acknowledged to-day, as we know from the efforts that are being made in all directions

to do away with the slums, to systematize work in social service among the poorer classes in the city; the endeavor to make parks, to beautify our cities, to do anything which will bring fresh air and fresh, clean surroundings to the children, possibly one of the best things that could be done for them. I claim then that one of their rights is this right of suitable environment, environment that will help them and will improve them and will build them up into useful, healthy citizens.

Then there is the right to play. Why should we deny that to the children? If the child has a right of any kind under heaven, it is the right to play. We are realizing that more and more in all our cities and towns all over the continent. We are having supervised playgrounds for kindergartens and schools. We recognize the children's right to play, and why shouldn't they have it? Can you find anything more pitiful—and some of you have found it, I know—than the child who never learned to play?

Then the fourth article of that charter of children's rights is the right to receive an education. There is where you ladies and gentlemen come into this question of children's rights, where you are now working for it and doing your share—the right to receive an education. That right is not confined to those who are perfectly normal. That is not the idea. The State is realizing more and more that if democracy is to succeed it must be an educated democracy. There is no tyranny greater, I think, than that of an uneducated democracy. We have instances of it. I need not go into details. We know what it means. We saw it in the French Revolution; I think we are seeing it in Russia to-day. We are seeing what an uneducated democracy means. There is no tyranny equal to it.

A democracy to be successful must be an educated democracy, and the State is realizing that as it perhaps never did before. And that educated democracy, we must remember, so far as the children are concerned, must include not only the normal but the subnormal and the abnormal, and those who have any limitations which will hinder them from receiving their fullest development. Here again is where we come in—will you pardon me if I say “we” instead of “you”? for to-night I am one of you—here is where we come in, in our share of the work.

The State appears to have taken it upon itself as its duty to a large extent to offer training to those who are blind, to those who are deaf. The education of those who are mentally deficient (or shall I say “mentally sluggish”?) seems to be attended to more by the local authorities; that is to say that our cities and towns are themselves providing classes where these children are receiving the attention which they should have and which for many years they did not have; but, so far as I know, the State has looked upon it as its duty to see that opportunity is offered to those who are blind and those who are deaf, that they too shall have the opportunity of receiving that training which will help them to take their proper place in the world.

So that it has come about by gradual growth, it seems to me, here a little, there a little, one State taking hold of it, another State taking hold of it, until gradually we are having established all over our continent—the Anglo-Saxon portion, at all events, of our continent of North America—we are having that, shall I say, evolutionary advancement, a process of advancement as yet far from perfect, I

will grant—if it were perfect there would be no necessity for a meeting of this kind to-night, except to rejoice—but this advancement is constantly going on, showing steady progress. Your gathering here is one of the steps in that progress, and I am perfectly sure that your gathering here will have a very far-reaching effect.

You are here from the East, from the South, from the West. You are coming North, and you will all carry back with you, I hope, something that will help you in your work. These conventions meet for this very purpose of marking progress, comparing notes, and benefiting from intercourse with each other and from each other's experiences.

Pardon my stressing this line, but I wanted to show what seems to me the place that we occupy in this course of evolution, which I have been tracing, and the point that we have reached. You are here now to consult and, as I said, swap experiences with each other as to the work which you have been doing, and we as educationists here in Ontario bid you welcome, because you are fellow workers with ourselves, filled with the same ideals of service to the State and to humanity, imbued with the same high sense of privileges and consequent responsibilities, convinced, I am sure, that there is nothing higher or nobler on earth than the work in which we are engaged. We welcome you because you are struggling with problems similar to our own, facing, and I trust overcoming, difficulties just as we are, learning by experience the best methods of obtaining our objective, which is to place those who are laboring under disabilities in such a position that their disability may be a minimum hindrance to their advancement.

I trust that during the few days which you spend here in this beautiful city of ours, your meeting may be both pleasant and profitable. In saying this I am only echoing the wishes of those for whom I am speaking, from a social as well as from an educational point of view, and I trust that you will carry away with you to your several homes very pleasant recollections of the few days spent in Belleville—and not only pleasant recollections, but I trust that you will find yourselves returning to your homes inspired and filled with more courage and more energy for your work in the future.

I thank you. [Applause.]

Doctor HALL. Mr. Robertson, president of the Chamber of Commerce of the city of Belleville, will give us a few words of welcome.

ADDRESS OF MR. MACKENZIE ROBERTSON, PRESIDENT OF THE CHAMBER OF COMMERCE, BELLEVILLE, ONTARIO.

MR. ROBERTSON. Mr. President, ladies and gentlemen, it is my duty and my pleasure to be here to-night to welcome you on behalf of the Chamber of Commerce of the city of Belleville. We, who live down the hill in the city are very glad to cooperate with the staff of the institute for the deaf here at Belleville, not only in giving you a welcome to our city, but in trying, if you will let us, to do anything we can to make your stay here as pleasant as possible.

We have here, as Mr. Houston has told you, a very beautiful city, beautified by natural hills and surroundings. We have to the north of us a county that runs for over a hundred miles, one of the largest counties in the Province of Ontario, and to the south of us we have the Province of Prince Edward, which we claim is one of the most

beautiful, and we, of the chamber of commerce, together with other citizens of Belleville, will be glad to show you some of the beauties, not only of the city but of the counties that surround the city, if you will only let us.

To me this gathering is something entirely new. We, who are in business, know perhaps—or should know—considerable about our own line, but it is very hard to know very much about the efforts and endeavors of those in other lines.

Doctor Coughlin here is not only a credit to this institution, but his whole heart and soul are wrapped up in making the institution a success, and we appreciate the work that he and his staff are doing here; we appreciate the assistance that the Province of Ontario is giving in the way of new buildings. The institution is doing a work of great benefit to those who attend, a work so great that the citizens, I think, do not fully realize its magnitude.

As I look over the audience, I know so little about the work that I am not sure whether I am looking altogether at teachers and instructors, but I notice that the ladies are greatly in the majority. I do not know that it is for me to say whether that is because they are better talkers or better listeners in instructing the deaf; or perhaps it is that they understand the lip movement better. [Laughter.] I really do not know. But at any rate, as Mr. Houston said in his address, we have the ladies in politics; we have them in any and every sphere of life, and we know that they are just as good as the men, and I will agree with Mr. Houston and add "plus" to that. We appreciate the work that they are doing and the effort they are putting forth.

Mr. Houston spoke of the anxiety of Doctor Grant, the minister of education, to-day in fighting a battle for his life, for his political honor in his own county. We, of course, may or may not hope that the honorable doctor gets in or not. That depends altogether on our politics in this country, the same as it depends on the politics across the line. We all don't want the same man to get in, and the doctor may have had a strenuous day to-day, but he had a no more unpleasant task than I had, because I worked all day trying to draw votes for the side that we know always loses in West Hastings. [Laughter and applause.] There are even some in the audience who are glad that that side always loses. I see that. [Laughter.]

I would like also to say that perhaps some of you notice that it is very warm here. To our American friends I would like to say that I am glad that you came to Ontario during a period of real Ontario summer heat, because in my travels to the South—and I had the pleasure of living in the State of Kansas for a year, where you get real heat—I say, in my travels to the South I always find Americans looking on Canada as a very cold country, and I am sure that our good friends from the south of us, after being up here and attending this convention will go back and tell their friends that it is not always cold up in Ontario.

I welcome you on behalf of the chamber of commerce, and I want to say to Doctor Coughlin and to the staff of the Ontario Institution for the Deaf that if there is anything that the chamber of commerce can do, either in organizing trips with our motor cars or in assisting in any way, I am sure we will be very glad to do it.

I thank you.

Doctor HALL. Mr. Scott, president of the Rotarians, will extend a welcome to the meeting.

ADDRESS OF MR. O. H. SCOTT, PRESIDENT OF THE ROTARIANS, OF BELLEVILLE, ONTARIO.

Mr. SCOTT. Mr. President, ladies, and gentlemen, it is my privilege on behalf of the Rotary Club of Belleville to extend to you greetings this evening.

Rotary, as you know, has been established for about 18 years. Belleville has only had a club for about three years, but through our club we have greeted a great many of our good friends and fellow Rotarians from the South. Several of them were with us to-day at our luncheon. We were only sorry that more were not there.

As a great many of you no doubt know, the slogan of Rotary is "Service before self." The club is prepared while you are here in the city to do any service which you would like to have them do. All you have to do is to make your wants known through Doctor Coughlin or any of his staff, and the Rotary Club of Belleville will be only too pleased to carry out their slogan.

I wish for you a most profitable and happy convention.

I thank you.

Doctor HALL. Mr. Collister, representing the Kiwanians, will also give us a word of greeting.

ADDRESS OF MR. THOMAS COLLISTER, REPRESENTING THE KIWANIS CLUB OF BELLEVILLE, ONTARIO.

Mr. COLLISTER. Mr. President, ladies, and gentlemen, it is my privilege on behalf of the Kiwanis Club of Belleville to welcome the delegates to this convention to the city of Belleville, and I may say with our friend Mr. Scott, of the Rotary Club, that we too will do what we can to make your sojourn here a pleasant one, if Doctor Coughlin and his staff will let us know what line of entertainment may be required.

I might also say, while on my feet, if there are any Kiwanians here it will be a pleasure for us to have them to lunch with us to-morrow at 12.15 at the Quinte Hotel. I understand there are quite a number present and we will be very glad to have you all there, although the space is quite limited, I will admit, but the gentlemen are very few—the ladies are quite in the majority, and they are not Kiwanians—at least they are not here anyway, so I think we can take care of most of the men that are Kiwanians.

I thank you.

Doctor HALL. I know we all want to hear a word from our host, Doctor Coughlin.

ADDRESS OF DR. C. B. COUGHLIN, SUPERINTENDENT OF THE ONTARIO SCHOOL.

Doctor COUGHLIN. Doctor Hall, ladies, and gentlemen, I am sure that it gives me very great pleasure to be able to welcome this convention of the American instructors of the deaf to our school. The selection of our school as the place to hold this convention we felt to be a very great honor. We appreciate your presence here and we

hope that you will find the convention not only useful but in every way congenial and pleasant, and that when you go away you will feel that your visit to Belleville has been one not soon to be forgotten.

In extending a welcome to the convention of American instructors of the deaf, it might be thought that it consisted only of citizens of the United States, but we in this country have long been members of that association, and I welcome not only the delegates from the United States but the delegates from all the Provinces of Canada from the Atlantic to the Pacific, including our French-Canadian friends from Quebec.

I also wish to welcome particularly to this convention our friends from overseas, the British delegates present, and trust that they will be repaid for journeying so far by finding their visit to Ontario both interesting and beneficial.

I am not going to detain you. The night is warm and the program is fairly long, and I think you all feel that you want to get out in the fresh air as soon as possible.

I hope that the discussions and meetings of the convention will inure to the benefit of the deaf of this continent and to the deaf of the world. There is no class of people more sincere, more zealous, more hard-working than the teachers of the deaf. Their work is not always appreciated. Even in this Province we find a great many people to whom our work is not known, and we find a great many who have no adequate conception of the strenuous work that must be done in order that deaf children may be educated. I have no hesitancy in saying that it requires more skill to educate a deaf child than it does to educate any other child in the world, and that as far as the science of education is concerned, no matter in what branch educators may be engaged, there is no kind of educational work in which greater technical knowledge and greater skill and greater zeal is required than in the education of the deaf.

I do not want to be drawn off into any further remarks on this subject. My only purpose just now is to extend to each and all a most hearty welcome to our school. I want you to feel at home here. All our doors are wide open, everything we have is yours during your stay with us, we are all at your service and desire to do everything we can to make your all-too-brief sojourn with us as comfortable and enjoyable and profitable as possible. I am glad to see representatives of the Rotarians, Kiwanis Club, and the Belleville Chamber of Commerce on the platform and am sure that the members of these organizations and the people of Belleville generally will utilize every opportunity to contribute to your enjoyment.

I thank you again for the honor that you have conferred on this school by holding your convention here and hope that you will find it profitable. It has been a great pleasure to me to meet again so many old friends whom I have met at former conventions, and I hope to make many new ones at this meeting.

I thank you.

Doctor HALL. Is Colonel Ponton here? We would like to have a few words from Colonel Ponton.

ADDRESS OF COL. WILLIAM N. PONTON.

Colonel PONTON. Doctor Hall, ladies and gentlemen, I suppose that I am here to represent agriculture, because I am the nearest neighbor of Doctor Coughlin, the nearest farmer neighbor of the school for the deaf, and perhaps it is by the degree of "higher radiance shed" that we do thrive in the sacred soil of Sidney adjoining Belleville and mingle culture with agriculture. We catch a contagion, an infection of education from this institution.

You know, I am one of the old brigade. I can go back to 1870. I can go back to the memories of Doctor Palmer, of Mr. McGann, Professor Coleman, and Mr. Green, Mrs. Terrill, Mr. Matheson, and all those wonderful men and women who bore the burden of the heat of the day and who laid the foundation after all for that wonderful superstructure that you are not merely enjoying but employing, because I take it that the teachers of the deaf say to the great Almighty Whose blessing you invoke: "Take my intellect and use every power as Thou shalt choose."

May I just illustrate three results of this institution and of the education and associations thereof? Sir Gilbert Parker, Member of Parliament for Gravesend for 18 years, the head of more committees in the British House of Commons than probably any other member on his side, said that all that is dramatic, much that is expressive, much that is demonstrative in his writings and his speeches—some say that he is a better speaker than writer—came from his three years spent here, because he had learned, as we all do who study this subject, that we are dealing with the spirit of life. Letters form words, but you are dealing with something higher than words; you are dealing with thought transmission; you are dealing with spirit, with something beyond the hearing ear. To the understanding heart the volume of sacred lore always ascends, and so from the understanding heart to the understanding mind; and the three together, that trinity, body, mind and spirit, are yours. The great heritage you have, that you are developing, is not a garden without water; it is a well-watered garden, watered with intellect and enthusiasm and productive work.

I have one other. When I was up last October at the Abitibi pulp mills at Iroquois Falls, where material for the New York Times, the Buffalo papers, the Cleveland papers, many of the Toronto papers—where the pulp is made—they have secured 59 townships, thousands and thousands of miles of pulp wood limits there, where the logs in the morning are shipped to the New York Times in the evening, in the form of paper, let me tell you who was the chief shipping clerk, who was the one man who checked every bale of paper that went out; it was a student of this institution, of this school for the deaf, whose eye nothing could evade. He could not hear but he could see, and the flash of that eye could detect anything, the weight, the measure, the number of bales—everything was in his charge. He was a student for over seven years at this school for the deaf. And so the New York Times owes to that boy, that pupil of this school here, the prompt and correct transmission every day of the paper on which the issue for the following week will be published.

I don't know whether Mrs. Balis is here, Mrs. Balis and her kith and kin, who are very dear friends to us. Perhaps Mrs. Balis will

pardon one reminiscence for the sake of the good of the cause and the joy of life. Once long ago we had a boy in Belleville, the son-in-law of Mr. Harry Corby, who is pretty well known, who was named Charlie Laidlaw. Charlie Laidlaw would not believe that Mrs. Balis could read the lips and carry on a delightful conversation; that Mrs. Balis, who went to all the dances in those fine old days, could dance as well as any of them and could hear the music, rhythmic, vibrant, concordant as we all hear it, and so he said "Introduce me to her. It is simply woman's wit and woman's repartee, woman's banter. It is her quickness of apprehension that enables her to talk." Well, tradition has it that he was introduced to her about 12 o'clock at a party in the Hotel Quinte. I trust I am not giving away any personal secrets. He at once, being a bit of a wag and a very eloquent one, plunged into the arena and said, "My dear Mrs. Balis, I am so delighted to meet you, and at this witching hour of midnight, when ghosts do walk and every mystery surrounds, I want to tell you about a little adventure I had last night.

"In coming along the dark street, passing the Methodist Episcopal graveyard, I saw a Presbyterian giraffe dancing with a Roman Catholic camelopard." Mrs. Balis looked up at him and said, "And what had you been drinking, Mr. Laidlaw?" [Laughter and applause.] Mr. Laidlaw is now the manager of one of the great banks in Toronto, and we who know him well never meet him since those days but that we ask him that one question, which is more of an invitation and a challenge than anything else, "And what have you been drinking, Mr. Laidlaw?"

I do trust that your meeting here will be fertile, will be fruitful. Oh, what a reservoir this will be when you pour into it all your tributary streams of knowledge and of experience, the experience of the past, the experience of the individual for the collective benefit of the many in this living, pulsing present—this clearing house of ideas.

Now, I would be lacking in neighborliness and I would be failing to be your interpreter if I did not to my old friend Doctor Coughlin, as you do, express the deepest sympathy for the care and the anxiety that he is now suffering, for the illness and the pain of that gentle and gracious lady whose winsome personality has endeared her to all of us. Oh, the household, the well, the happy household, is woman's masterpiece, but woman is God's masterpiece, and surely Mrs. Coughlin is one of God's masterpieces.

Doctor HALL. We would like to have Mr. Haycock respond to the delightful speeches of welcome, as representing our friends from across the water.

ADDRESS OF MR. GEORGE S. HAYCOCK, OF LONDON.

MR. HAYCOCK. Doctor Hall, Doctor Coughlin, ladies and gentlemen, at this late hour I do not intend to say much, but I must thank you very heartily for the warm welcome we have received. I thank you not only for myself but also for the teachers who have come from the other side of the water in response to the cordial invitation extended to British teachers by your esteemed president. We are a small contingent, but though weak in numbers I think we are strong in our enthusiasm.

We are also, I think, representative—representative of different kinds of schools and institutions and representative of localities.

There are two of us from London, representing the southern, the metropolitan branch of our college, and there are two from Birmingham, representing the midland branch, and there are two from Yorkshire, representing the northern branch. Then there are two from Scotland, representing the Scotia branch.

Of the six or eight members I think three or four of us are members of the executive committee of the general committee. Indeed, you have with you not only the chairman of the college but the chairman of the midland branch, Miss Baker.

I think I ought to explain that this college corresponds not exactly but somewhat to your convention of American instructors. On its roll are the names of practically every qualified teacher of the deaf in Great Britain and Ireland. Since I arrived here there has been a general executive meeting held at Derby, I think it was, and the Yorkshire representative of the northern branch, Rev. Father Wilson, who also is a member of that executive, has brought a message to the convention from the executive, and with your permission I will read it:

That this meeting of the executive of the National College of Teachers of the Deaf in Great Britain sends greetings to the Convention of American Instructors of the Deaf, meeting at Belleville, Ontario, from June 25 to 30, and hopes that their deliberations may be productive of much good to the education of the deaf in all lands.

Now I am confident that results will issue. The papers, the informal interchange of ideas in and out of the assembly hall, and the subsequent study of those papers when printed must inevitably accelerate the wheels of progress. The imaginative work which is being done on this great continent is followed with the keenest interest by teachers of the deaf in England, and we very greatly rejoice at the zeal and enthusiasm with which you pursue your high aims.

Of course your problems are very largely our problems, and as we, therefore, have some inside knowledge of the inherent difficulties with which you have to contend, we can better appreciate and appraise the success which you achieve in approaching their solution.

Now, I will not say any more at this time, but I have one or two personal messages which I have been asked to deliver. Mr. Barnes, who is known to a great many of you, he having visited America on several occasions and made friends, has asked me to express his personal regret at being absent. He was ready to come. He had done everything short of taking out his ticket, but at the last minute he had to stay at home.

Then, Mr. Storey, whom you know through his writings, also intended to come, but again circumstances prevented him, and he sends his regrets.

And associated with Mr. Barnes is Miss Barnes, who was present at your convention at Mount Airy three years ago, I think—she sends kind greetings to all her friends.

Then I have another request, one from Doctor Addison, who is well known to a great many of you—he has visited your schools three or four times—he and I and a young lady, Miss Condon, and Mr. Forrester came over in 1898 and attended the convention at Columbus, Ohio, and nothing would have pleased Doctor Addison and his wife, formerly Miss Condon, better than to have come to this convention. I mention it because it was the convention at Columbus

which brought Doctor Addison and Miss Condon together for the first time, and they interchanged a great many ideas, some of which were not on the official program, and the result was that they agreed to set up a permanent convention of two with office and residence in Glasgow. This is the twenty-fifth anniversary of their visit here, as it is of mine, and this gathering would have afforded them the keenest pleasure could they have been here.

Doctor HALL. I will now ask Doctor Dobyns, superintendent of the Arkansas School for the Deaf, to respond for our brothers on the other side of the line.

ADDRESS OF DR. J. R. DOBYNS, SUPERINTENDENT OF THE ARKANSAS SCHOOL.

Doctor DOBYNS. Mr. President, representatives of the Dominion, of the school for the deaf, of the clubs of the city, and my fellow workers from several lands, I am sorry, with you, that we have not the pleasure to-night of hearing this response from the dean of the schools of the deaf of the world, Doctor Walker, of South Carolina one of the most distinguished educators of the deaf to-day. I do not know why my friend, President Hall, chose me to try to take his place, unless it was that I am from the Province of Arkansas, known in the States as the "wonder State."

Arkansas, I will say for the benefit of my friends on this side of the border, is the only State in the Union around which you could erect an impassible wall and have everything necessary to make life happy and comfortable. It produces everything; material for clothing, most of the oil in the South, and much of the gas [laughter], some of the silver and some of the gold of the United States, and to tell you the truth, it has the only diamond mine within the United States of America, the diamonds of which have been tested by Mr. Tiffany and pronounced pure, whatever the term means—the finest diamonds in the world.

Since leaving my home away down South and looking out over this broad land I have been wondering why there should be any line dividing this great continent. The sweeping prairies, the wonderful forests with their boundless contiguity of shade, the sheep, and the cattle, the fields and the flowers and the fruits look very much alike; the lakes on our side look just as they do on yours. But it is not only this physical evidence; there are other evidences of harmony and many reasons why we should be one people. Our men in commerce and business are alike.

A stern old Scotch Canadian who had made a fortune on one of these beautiful farms sold it and moved down into Arkansas to make another fortune. He was one of those old Scotchmen who hold on to their religion and their money. He and his wife—they had no children—wanted to try the machine when the man came to the community to take the people up in the air and let them see something new. The old Canadian with his wife came down to see him and to bargain for a ride. The man told him that his regular price was \$25 a head. The old man said "I couldn't think of spending that much for a ride for two." They argued the matter and finally the flying-machine man said, "I'll make this bargain with you: I'll take both you and your wife for a ride for \$25 if you will

promise not to open your mouth while you are in the machine." "All right. That's a go," said the Canadian.

So they started. They looped the loop and did everything else, made all the turns possible, and finally they came back and the pilot turned around and said, "Well, you did it all right." "Yes," said the Canadian, "but I came near losing once." "When was that?" "When my wife fell out." [Laughter.]

My friends in Canada, we have down in the South and in the States people very much like that old man. There is a good man living down in Missouri—Tillinghast may know him. He is very fond of his mother-in-law and sends her—used to—every winter to Florida to have a good time. Last winter he sent her down as usual. In a few days he received a wire, "Your mother-in-law, while out sailing, was drowned. We haven't been able to find the body." He advised them to continue the search. In a week or 10 days, he received a wire saying, "The body has been found, covered with lobsters. Wire instructions." He wired, "Send the lobsters by express and set her again." [Laughter.]

But, Mr. President, we have some exceptions down there that you do not have up here. We have one man who claims he came up from a monkey. And that man is right here. If you tried to pick him out of this audience you couldn't do it, because he is such a fine-looking fellow. But he says it is so and we will have to take it as so. I tell him the difference between him and the balance of us is, he came up from the monkeys and we came down from the giants.

Now, friends of the Dominion, this similarity extends everywhere, and why should we have this imaginary line between us? But how do we hold together, though we are divided? Let me now, for just three minutes, wave before you the most remarkable banner that has ever been unfurled on this great continent, the banner under which we are all fighting, the banner that was unfurled by one of Canada's distinguished sons, Dr. J. A. McDonald, editor of the *Toronto Globe*, and this, Mr. Secretary, I want to go into the record, that the teachers of the deaf in this country and everywhere may behold it and appreciate it. The United States, standing at the "zenith city of the unsalted seas," continually salutes this wonderful banner which has been unfurled from the loftiest pinnacle of the highest mountain of this wonderful and this great section.

North America has achieved many notable things in the sciences and arts of life. Both in the United States and Canada, worthy contributions have been made to the conveniences and comforts and dignities of civilization. In many of these things we have but followed where others have led. But in one thing North America stands alone. One achievement is unique, original, the model and the inspiration for all continents. It is the joint achievement of America's two English-speaking nations. It is the international boundary line which spans this continent from ocean to ocean, for 4,000 miles and across which, in 100 years, neither nation has ever once launched a menacing army or fired a hostile gun. A thousand miles of open river, a thousand miles of inland seas, a thousand of sweeping prairies, a thousand miles of mountain range. Four thousand miles of civilized internationalism. Over every mile of it nation meets nation, sovereignty meets sovereignty, but never a fortress, never a battleship, never a gun, never a sentinel on guard. Without precedent in any century, without parallel on any continent, that boundary line between the United States and Canada is America's greatest achievement, at once the marvel and the admiration of the world.

How comes it that North America has so greatly achieved? On other continents nations still crouch under burdens of their wars and linger in the half barbarism of their armed peace. But the United States and Canada, with the blood of the lion, the blood of the eagle, the blood of the bear, all the savage bloods of Europe's jungle, mingled in their veins—these two nations of the proud Anglo-Saxon breed divide almost equally this vast continent and hold it unbarbarized by the black menace of war. And why? For this reason: The United States and Canada have both learned from their common mother that national unity is at the basis of national integrity; they have each developed into a national unity of its own, self-contained, purposeful, strong; they desire supremely to be free, they are both fit for freedom, and they have each united all their peoples in unreserved devotion to freedom's great experiment. Through this one unique experience Britain and America have learned for themselves and would teach the world this new maxim of international politics; any nation that desires to be free, and is fit to be free, and stands for national freedom, must be given freedom's unfettered chance.

And America's world vocation is clearer, more insistent, more appealing than any call that ever disturbed any ancient people. Israel, Greece, and Rome, Spain, France, and Britain, Germany, Russia, and the new nations east and west—these all have had days of visitation. But to no one of them came a chance so stupendous, a vocation so commanding, a vision so splendid, as now challenges America. Every fact of geography, every distinction of history, every achievement of American genius, all that is worthy in American commerce, all that is noble in American diplomacy, and all that is vital in American religion combine in one irresistible, one inescapable challenge, to the America of to-day, that the Latin republics of this hemisphere and the merging nationalities of Africa and the awakening Orient, may have their full chance to know and drink of the Christian civilization by which America has achieved.

My friends, we reciprocate most cordially your very hearty greetings, and will accept your invitations to all dinners, all automobile and boat rides and anything else you have to lavish upon us. [Laughter and applause.]

Doctor HALL. Doctor Coughlin, ladies, and gentlemen, as president of the convention, I am going to take a little of your time in reviewing a few of the matters of interest to this convention and making a few suggestions, and I promise you that this will be my swan song.

ADDRESS OF DR. PERCIVAL HALL, PRESIDENT OF THE COLUMBIA INSTITUTION FOR THE DEAF.

Doctor HALL. Since the joint meeting of the Convention of American Instructors of the Deaf, the Association for the Promotion of Teaching Speech to the Deaf, and the Progressive Oral Advocates, held at the Pennsylvania Institution at Mount Airy in 1920, much of interest has happened in our chosen field of work.

Death has claimed from among both the younger and older members of our profession all too many of our leaders. Doctor Burt, of the Western Pennsylvania Institution, and Doctor Argo, of the Colorado School, died after many years of service in our profession. Among others claimed by death, whose experience had not been of such length, but of whose helpfulness in our cause there was no doubt, were Mr. McGuire, Mrs. W. K. Argo, Mr. William C. McClure, Doctor McDermid, Mrs. Kate Hermann, Supt. L. L. Wright, and Supt. Frank Read.

Large as our permanent loss has been from deaths among our ranks, it has been equalled by the loss of many of our heads of schools through retirement. Dr. J. H. Cloud, Supt. Horace Walker, Supt. H. T. White, Supt. W. E. Taylor, Supt. T. P. Clarke, Supt. J. Stuart Morrison, Supt. Elwood A. Stevenson, Supt. Howard Griffin, Supt. Frank

Burdette, Mr. J. A. Weaver, Miss Helen Throckmorton, and Dr. Caroline A. Yale have given up their responsibilities as leaders of our special schools, although it is a pleasure to record the fact that a few of them are still connected with our institutions in some capacity.

It speaks most highly of the abilities of our teaching staffs that nearly all of the numerous vacancies left by these leaders have been filled acceptably by the promotion of men and women already in our teaching force. It is encouraging also from the viewpoint of progress to find that the disposition on the part of governing boards in almost every case of need has been to find the best-equipped person available to take charge of the school which has lacked a head.

This large number of changes in heads of schools makes it all the more important that regular meetings of all of our professional associations shall be held so that our schools and their heads may be as closely as possible in touch with work being done in our special field throughout America. The convention has kept up with very little alteration its schedule of one meeting in every three years. Its local sections might well consider gatherings at more frequent intervals. A move in this direction has already been made in New York State by the schools in that Commonwealth. I suggest attention to a plan whereby schools in the neighborhood of New York City may benefit by these gatherings and those of the West and South may arrange for local meetings.

The association for the promotion of teaching speech to the deaf has held only one meeting, that a joint one, during a good many years. The conference of superintendents and principals has not met since the winter of 1919. It would certainly seem helpful if this body would have a meeting of several days' duration at intervals of not more than three years.

The many changes in heads of schools referred to have brought perhaps more strongly before us than anything else, one of the great problems now confronting our profession. That is the inducing of able young men and women of high character, good education, and executive ability to enter the profession of teaching the deaf. For with the filling of the vacancies referred to and the promotion of able young men and women, there has been an increase in the number of pupils to be taught, an increase too it is true in the number of teachers employed, but at the same time a decrease in the proportion of men in our profession. Nothing shows this more plainly than the statistics published in the January Annals, which give in October, 1919, a total of 12,839 pupils in the schools of the United States, 1,924 teachers employed, 454 of whom were men; while October, 1922, shows the corresponding number of 14,755, a gain of nearly 2,000 pupils, 2,092 teachers, a gain of 168, and 452 men, a gain of only 8.

There are, no doubt, many factors influencing the entrance of men into the teaching profession, especially in our lower grades. The same influences are at work in schools for normal children as well.

One of the factors, without question, is the low scale of salaries offered in teaching work generally. Another factor is the tremendous business expansion of the country with the consequent prospects of promotion to enterprising young people. Another factor, no doubt influencing many young men, is a dislike for the teaching of elementary subjects.

It is certainly one of the duties of every member of this convention to try to bring into our profession a larger number of well-equipped young men and women, especially young men, for the maintaining and building up of our teaching standards. The Columbia Institution for the Deaf at Washington, since 1891, has worked unceasingly on this problem. By the establishment of a normal department, from which there have been graduated 95 holders of college diplomas and 47 high-school or normal-school graduates, we have tried to aid in the solution of the problem under discussion. The fact that of the normal students whom we have trained 7 have become head teachers or principals, 4 have become professors in our college, and 24 have become executive heads of schools proves conclusively that high-class school work and executive ability will bring its reward in our profession.

During the World War it was almost impossible to obtain for our normal class graduates of colleges. During the past year, however, five such young people were admitted to our class, and four have just been graduated. There are excellent prospects that we shall be able this fall to train a small class of young men and women holding college diplomas, but we shall still be glad to hear from other candidates whom any of our friends may suggest.

The whole question of teacher training is, of course, of great importance to us.

All those schools which have established and maintained high-grade training classes for the preparation of teachers are to be encouraged and congratulated, and those teachers who by friendly explanation can attract into our profession worthy young people are doing a work which is much needed for the preservation of standards in our chosen work. During the past three years the Virginia school has opened a regular training class, a summer course has recently been announced at the Illinois school, and it is hoped that in several other schools, especially in the West, courses of at least one year's preparation will be established. The question of standardizing such courses and granting a diploma which will be accepted with general confidence throughout the country is one which remains yet to be solved. Certainly the minimum time of preparation should be a year beyond high school. Personally, I believe it should be at least one year beyond regular normal courses, and the maximum should require college training with a year's additional special work.

Considerable progress has been made in our profession toward the raising of salaries of teachers and officers employed in our schools. Scales are still too low, especially for the officers who have charge of children outside of school hours. While we can not expect that teaching will offer opportunities for money making, such as many kinds of business do, at the same time it is absolutely necessary to offer to teachers whom we expect to keep in our work a living wage, with enough beyond to provide for a pension in old age.

Progress has been made in certain States, notably New York, New Jersey, and California, toward the pensioning of teachers of long service. Nothing has yet been done, to my knowledge, to establish a general pension scheme. I believe it quite possible, however, for the convention, by interesting the Teachers Insurance and Annuity Association of New York, to have worked out for any school or group of schools a contributory pension plan which would be perfectly

feasible, at a moderate expense to the school itself and to the teachers joining it. Such a plan was in fact worked out for our own institution some years ago, and, when means are available for us to supply our part of the necessary expense, I feel that it should be adopted, unless a better arrangement can be made in the meantime.

It has been encouraging to see in a number of our States the increased interest in the education of the deaf on the part of the public and especially of the appropriating bodies of the Government. The States of Kansas and New Jersey have lately increased their appropriations for salaries and repairs very largely. Grants of considerable size have been made to the Florida school and to the North Dakota school for new dormitories, to the Colorado school for a new gymnasium, to the Iowa school for a primary department, to the Wisconsin school, the Maryland school, the North Carolina school, and to others for extensive improvements. Complete new plants have been opened for the Ontario school, the Manitoba school at Winnipeg, the Arizona school, the American school at Hartford, and also for the school in Manila, P. I. The New Jersey school and Tennessee school already have new grounds and will have, in the course of a short time, groups of buildings of modern construction.

Another encouraging feature of our work has been the recognition by the State authorities of the proper place of schools for the deaf among the educational institutions of the Commonwealth. The West Virginia school has been transferred to the management of the State board of education; the Arkansas school has been provided with a special board of its own and has been legally entitled the "Arkansas School for the Deaf." The New Mexico Asylum for the Deaf and Dumb has been made the New Mexico School for the Deaf. The Iowa school has become a part of the educational system of the State. Without question, the tendency of the times is to draw away our schools from the control of boards of charity and our work from the general group of charitable works. In many of these matters there is cause for congratulation.

There are three matters to which it seems to me proper to call your attention, as likely to cause disappointment to many of those deeply interested in the welfare of the deaf.

The first is the lack of attention that is evidently given to manual instruction in some parts of the country. One of the strongest evidences of this is the fact that the average number of children taught in manual classes is greater than the number taught in oral classes. The difference varies from none in the schools in Canada, I am glad to say, to five in the public day schools, as reported in the *Annals*. In many of our manual classes are found the slow pupils, those entered in school late, those who have not succeeded in speech reading, and those who do not seem to fit anywhere else and who in consequence have lost considerable valuable time in school work. That such children need to be taught by just as successful teachers as those employed for the instruction of oral classes goes without saying, and that the number per teacher should be even smaller is evident in all cases where classes are made up of ungraded pupils. The fact that the results of Doctor Pintner's tests would seem to show unusual success with manual methods in classes of slow children in spite of their lack of natural ability should make us wonder all the more what results might be obtained with smaller classes and better grading under such instruction.

A second matter which causes uneasiness among us all is the lingering grip of politics upon the management of our schools. As long as changes in the executive positions in our schools are made on political grounds only, so long will it be difficult to obtain the highest grade of educators in our work. It is the belief of every true friend of the deaf that all positions in our schools should be filled by men of successful experience in education and if possible only by those whose experience with the deaf has been considerable. We are thankful for a number of additions to our profession of able executives who have come into our work without special experience, yet we believe their good work would have been still better with an earlier introduction to our special problems and with experience in actually teaching deaf children. Certainly the politics of a candidate for an executive position in one of our schools should not be considered of special moment. Nor should changes be made in every State educational institution when a different party comes into power. Let us hope and work for the passing of the day when a competent educator of the deaf—who has been informed by the chief executive of the State, only a short time previously, that his work has been satisfactory—shall be notified during the school term that he must give up his position in less than a week's time.

A third feature of our work which to my mind calls for constructive criticism in the future, is the lack of sufficiently high standards of graduation in our schools. Some years ago Gallaudet College made an effort to increase its entrance requirements for the preparatory class and for the freshman class. This was done only after consulting the schools and obtaining their promise of support. It developed in a short time that very few of our schools were really willing to require generally advanced standards for graduation and it was necessary to bring back entrance requirements almost to old standards of many years ago. As far as I know, the only large public school for the deaf in the country offering a high school standard of graduation is the western New York institution at Rochester, where the English method is used, manual spelling is largely employed and students are regularly given high-school work equivalent to the requirements of the board of regents for public high-school pupils. While it may not be feasible or possible for all of our schools to advance to this standard, I think that the head of every one of our institutions should make an effort toward better and higher instruction in English and mathematics and such other subjects as will enable them to send out into the world young men and young women who have practically reached at least the end of junior high school work.

It is a matter of distinct regret also to call your attention to the fact that so far as I know, there has been little progress made in real research work in connection with the education of the deaf or in any general plan for a comprehensive survey of our schools. It is unfortunate that the valuable work undertaken by Doctor Pintner and others should not have been carried further. The death of Miss Sarah Harvey Porter put an end to potentially valuable research work along general lines of psychology of the deaf by one of our ablest thinkers. At our own institution, members of our faculty are hoping to contribute within the next few years important suggestions in regard to the teaching of language. At the Clarke school a research

department is under process of formation. But has enough been accomplished? In all of this work which may be done and should be done in the future, it is my earnest hope that it will be undertaken with the broadest viewpoint and with nothing whatever before the investigators except a desire for the full development of the individual child. The value of a general survey of our schools with a comparison of equipment, industries, laws in regard to admission, methods of control, support, studies pursued and many other points of interest would no doubt be of great value to our profession. Before we meet again, I have hopes that this work will be under way. If this is done, however, it should be done only by skilled investigators, broadminded and thorough.

We are greatly indebted to the Ontario school for its second invitation to meet in Belleville. We appreciate most highly the cordiality of our welcome and the enormous amount of careful preparation done by Doctor Coughlin and his associates.

During our meeting, to which we look forward with much pleasure during the days of the present week, we hope to listen to able papers and discussions from experienced teachers and heads of schools, and to be permitted to take back with us to our schools many ideas that will lead us to work for better equipment, better school plans, better salaries, more training in character, better educational training, including trades teaching, better normal training, more men teachers, in fact, advancement in all good lines, having no fear of using any and all proper means and methods leading to progress in our chosen work.

Before we adjourn I will ask Mr. Stewart to make some announcements in regard to the coming days.

Mr. STEWART. Mr. Chairman, ladies and gentlemen, after the oratory and eloquence and wit and wisdom that we have listened to, my task is a very prosaic one indeed, yet I am not sure but, perhaps, it is the most important and interesting to you of all. It comes most nearly home. And to speak of the most important first, I might announce that the meals will be served sharply—will begin sharply at 7.30, 12.30, and 6 o'clock every day, and you are all asked to cordially cooperate.

You will find at the far corner of the building a post office where you can get your mail at any time and procure cards and stamps. I might call your attention to the fact that the postage in Canada for letters is 3 cents, and for cards, 2 cents, 1 cent in each case being war tax, and I might add that I am glad it is so, because it is the only chance that I have seen so far of getting the United States to pay some part of the Canadian war debt.

Some of the American papers have generously offered to send you copies of their daily issues during the course of the convention. Three hundred copies of the New York Tribune will come every day, and numbers of various other papers, which you will find on tables in the halls and in the reading room upstairs. The only charge for these is that every one of you will take a copy of the New York Tribune every day—that was the understanding—and read it.

Also, the special convention number of our Canadian will be found on these tables, and we invite all of you to take one.

We have a radio which will be in working order by to-morrow—perhaps it is to-night for all I know—and occasionally during our

evening sessions and perhaps at other times you will be able to hear American music and American speeches and concerts to your heart's content. So you will feel quite at home, even in Belleville.

All the members of this staff wear a little badge which we call the badge of servitude or slavery. It means that every member of this staff is your servant and your slave during the course of this convention. If you want anything done, if you want to get any information about anything, just ask any person wearing that badge, and he will give it to you if it is humanly possible. Don't be afraid. Everything, as Doctor Coughlin has told you, is yours in this institution if you wish it, except—I notice some of the young men casting eyes toward some of our lady teachers—except—[laughter].

Doctor HALL. Copies of the program as laid out for to-morrow are here on the table and will be distributed this evening.

I will call your attention to the fact that from 8.30 to 9.30 to-morrow morning there will be two demonstrations of classroom work in the large classrooms close to the auditorium. There will also be a conference in this room on senior reading and senior geography, conducted by Mr. Stewart, and at 9.30 will begin the general session in this room.

Immediately after the close of this meeting we will adjourn to the hallways and the porches and to the front part of the building for an informal reception, at which time I hope you will have an opportunity to meet each other.

(Whereupon, at 10 o'clock p. m., the meeting adjourned until 9.30 o'clock a. m., Tuesday, June 26, 1923.)

SECOND DAY, TUESDAY JUNE 26, 1923.

PROGRAM.

8.30 to 9.30 a. m.:

Demonstration of oral class work: Grade 1, "Calendar and weather," room 1, Miss Gladys Bradley, Ontario school; grade 2, "Chart stories and question work," room 2, Miss Ethel Nurse, Ontario school.

Conference on senior reading and senior geography, Mr. G. F. Stewart, Ontario school, assembly hall.

9.30 to 10 a. m.:

General session, Doctor Hall presiding.

Appointment of—

Committee on necrology.

Committee on interpreters.

Assistant secretaries.

Nominating committee.

Auditing committee.

Greetings, regrets, announcements.

10 a. m. to 12 m.:

Oral section, Miss Julia Connery presiding.

Paper, "The Iowa idea," Mr. W. H. Gemmill, secretary finance committee, Iowa Board of Education.

Paper, "Projects," Miss Nettie McDaniel, Georgia school. Discussion, Miss Gertrude Van Adestine.

Paper, "Intermediate language," Miss Gertrude Croker, Gallaudet school, New York. Discussion, Miss Amelia De Motte.

Paper, "An experiment with backward children," Miss Mabel H. Gray, Clarke school.

1.30 to 3.30 p. m.:

Kindergarten section, Mrs. Anna C. Hurd, presiding.

Demonstration of sense training and voice building with young pupils, Miss Verne J. Smith, Belleville school.

Question box.

3.30 to 4.30 p. m.:

General session, Doctor Hall presiding.

Paper, "Practical arithmetic," Mr. Barton Sensenig, Pennsylvania Institution. Discussion.

8 p. m.:

Dancing and cards.

MORNING SESSION.

The convention reassembled at 9.30 a. m., pursuant to adjournment, Dr. Percival Hall presiding.

Doctor HALL. The meeting will please come to order.

I wish to announce the appointment of several committees.

First, the committee on necrology. I will ask Prof. Irving Fused to act as chairman, and will appoint as additional members on that committee Dr. J. Schuyler Long and Mr. A. B. Greener. I will ask this committee to prepare short obituary notices of members who have died during the past three years and put them in the hands of Professor Day.

As committee on interpreters for the balance of the meeting I will appoint Mrs. Sylvia Chapin Balis, chairman; Mr. Clayton McLaughlin, Mr. E. P. Clary, Miss Edith Fitzgerald, and Mr. H. Lorraine Tracy.

As assistant secretaries of our meeting I will appoint Prof. Herbert E. Day, of Gallaudet College, and Mr. Edward B. Lally, of this school. Professor Day will be in charge of all the papers. I will ask you to be sure and see that he has copies of all the papers read here during our meeting.

It is our custom when we come to our business meeting and election of officers to have nominations for officers from the floor, but we have had the custom of appointing a nominating committee to bring before the meeting suggestions for the heads of the various sections. This nominating committee I will ask Dr. Augustus Rogers to take charge of, with Mr. William A. Caldwell, Miss Gertrude Van Adestine, Mr. G. F. Stewart, and Miss Grace Coleman.

I would call the attention of the committee to the fact that all nominations for offices or for any other duties in connection with the convention, of course, should be confined to actual members of the convention.

I will also appoint a committee on honorary members. We have a good many visitors here who are not actively engaged in the instruction of the deaf, but we would like very much to have them join us as honorary members. I will ask Mr. Frank M. Driggs to act as chairman of that committee, with Miss Catherine Ford, of this school, Mr. E. S. Tillinghast, Mrs. Anna C. Hurd, and Mr. George Bateman. I will ask this committee to recommend a list of honorary members to be voted on at the business meeting on Thursday.

On the auditing committee, I will ask Dr. Charles R. Ely and Mr. O. A. Betts, who acted for us three years ago, to serve and to examine the treasurer's accounts and to report at the business meeting on Thursday morning.

I think our secretary has some announcements and greetings from absent members.

Mr. IGNATIUS BJORLEE. In the first place I would like to call to your attention the registration fee of \$1, which is expected of all who come to attend the convention. All who are teachers of the deaf or are connected with the work of educating the deaf should pay a fee of \$3. Other visitors will be expected to pay \$1 registration fee. Three dollars makes one a regular member of the convention.

Greetings have been received from Dr. Caroline Yale; Mr. R. Mathison, who was formerly superintendent of this school; and from Supt. A. C. Manning.

NORTHAMPTON, June 25.

Mr. ELBERT GRUVER,
School for the Deaf, Belleville:

Until two days ago I had expected to attend the convention. Greatly regret that it seems unwise to attempt the journey.

CAROLINE A. YALE.

TORONTO, ONTARIO, June 19, 1923.

MY DEAR MRS. BALIS: Owing to the continued serious illness of Mrs. M., I can not leave home for even a day, and will fail to be with the few of the old guard who were wont to foregather at the conferences in the former days.

Tender to any friends who may ask for me my best wishes and regards. You have kept in touch with many who will be there on the 25th, and will thoroughly enjoy meeting them, as you always do, both for your profit and theirs.

If I never did anything to uplift the deaf more than having the school put under the department of education, my life work has not been in vain and is gratifying to me in the evening of my life.

Yours always and sincerely,

R. MATHISON.

PITTSBURGH, June 24.

Dr. PERCIVAL HALL,
School for the Deaf, Belleville:

Greetings to all and the best wishes for a great meeting. With heart and mind I am with you. In body I am entertaining a quarantine of German measles. Extend to all for us a cordial invitation to visit Edgewood on the way home.

A. C. MANNING.

Doctor HALL. I would like to have the privilege of personally bringing before you the greetings of one of the members of this convention who is now very ill; one of the oldest members of the profession. I believe he is one of the two members of our profession now alive who attended the former meeting here at Belleville in 1874. I think there are only two members in our profession, both retired, who had the pleasure of meeting here at that time. I call your attention to the copy of the Silent Worker, which you will find in the chapel this morning. I am sure you will be very much interested in seeing the cut of the meeting, showing the gathering of teachers here at that time, with their old-fashioned hats and dresses and coats. You will find, I am sorry to say, very few faces that you will recognize. Nearly all are gone.

I wish to present to you the very cordial greetings of Dr. Edward Allen Fay, of Gallaudet College. Doctor Fay and Miss Ida Montgomery, formerly of the New York institution, were here in attendance in 1874.

Mr. BJORLEE. Here is an announcement from the Belleville Club of this city to Doctor Coughlin, superintendent of the school:

BELLEVILLE, ONTARIO, June 23, 1923.

Dr. C. B. COUGHLIN,
Ontario School for the Deaf, Belleville, Ontario.

DEAR SIR: The president and directors of the Belleville Club (Ltd.) present their compliments to the delegates attending the convention of the American Instructors of the Deaf, to be held here, at the Ontario School for the Deaf, and extend to the delegates the privileges of the Belleville Club during their attendance at the convention.

Yours faithfully,

G. DEAN, *Secretary-Treasurer.*

Doctor HALL. I am sure we are all very thankful for this invitation and for the very hearty welcome that the people of Belleville have already expressed to us through their various organizations.

Mr. H. E. DAY, of Gallaudet College, Washington, D. C. Mr. President, I should like to move that the convention send messages of greeting to Dr. Caroline A. Yale and Dr. E. A. Fay.

(The motion was seconded, put, and carried.)

Doctor HALL. The motion is carried unanimously. We will send the telegrams at once.

Now there are a few announcements before we go on.

Dr. J. R. DOBYNS, of the Arkansas School. Mr. President, right at this point I think we ought to send a message of sympathy to one of the former members of this convention, and one of the most popular members we ever had, Mr. R. Matheson, whose wife is at the point of death. I move that a resolution of sympathy from this convention be sent to Mr. Matheson at once.

(The motion was seconded, put, and carried.)

Doctor HALL. The motion is carried. It is so ordered.

I have a few announcements to make in regard to the program. I regret to say that Miss Eugenia Welsh will not be here, so in the morning program the discussion on Miss Gray's paper will be a general discussion.

In the afternoon program Mrs. Hurd has asked me to call your attention to the fact that the demonstration of kindergarten work will be in the kindergarten room at 1.30; at the close of the demonstration the gathering will assemble here and continue with the kindergarten program.

Dr. Harris Taylor wishes to call your attention to the fact that a gathering of the members of the association will be held Thursday evening.

There is a very large attendance of teachers and officers from the Illinois school, and they wish me to announce that this evening at 6 o'clock they would like to have all of their representatives together at two of the tables in the center of the dining room to eat dinner together.

The editors of the school papers are planning a dinner in a separate room on Wednesday evening. You will hear more about that later.

On Friday evening the normal graduates of Gallaudet College will gather at the center table in the dining room at dinner time, Friday evening at 6 o'clock.

I will call the attention of the executive committee to the meeting to-morrow afternoon at 5 o'clock, which will be held in the kinder-

garten room. Mr. Goodwin, Doctor Long, Mr. Bjorlee, Mr. Forrester, and Dr. A. H. Walker are members of that committee.

Is Miss Connery here? [No response.]

Is there any other business to present this morning, in the way of general business? If not, we will adjourn informally for a few minutes until 10 o'clock. Please do not go away. In a few minutes Miss Connery will open her regular work of the oral section.

Will you please give your attention to one or two other matters that have come up in the last few minutes? When the announcements were made I meant to announce that our good friends in the town of Belleville who are Kiwanians wish to entertain members of the convention who belong to that organization. They are preparing to come here at 12 o'clock with cars to take to luncheon any of the Kiwanians who wish to go down town and join them. Those who are Kiwanians and wish to take advantage of this invitation will please give their names to Mr. Laurens Walker this morning.

MR. JOHN E. TRAVIS, of the Indiana school. Mr. Chairman, I think we overlooked one name to whom we should also send a telegram of sympathy and greeting, and that is Dr. N. F. Walker, of South Carolina. I make a motion to that effect.

DOCTOR HALL. I am sure we will join in a unanimous agreement to this motion that the convention send to Dr. N. F. Walker a telegram of greeting, and I will ask the secretary to add his name to those which we have already agreed upon.

I now have the pleasure of turning the conduct of the meeting over to Miss Connery, who will take charge of the program of the oral section.

MISS JULIA CONNERY. We consider in the Middle West that Iowa leads in educational matters, and I am sure Mr. Gemmill, who is down on the program to speak about the Iowa idea, will have something of tremendous importance to tell us. I take great pleasure in introducing Mr. W. H. Gemmill, of the Iowa Board of Education.

ADDRESS OF MR. W. H. GEMMILL, SECRETARY FINANCE COMMITTEE, IOWA BOARD OF EDUCATION.

MR. GEMMILL. Educators of the deaf, ladies and gentlemen, let me say one word in the beginning that is not in the paper. When a person speaks about something that concerns himself or his family or his friends or his State, you know he is close to home. I have been told that self-praise is half scandal. Now I have done my utmost to eliminate everything excepting a simple statement of fact regarding certain conditions in the State as I see them—as I have been told about them, and so if perchance I may happen to say something that is a little laudatory I wish you would remember this, that I do not intend to give Iowa or Iowa people any praise of the kind that in the vernacular we say that "we brag about ourselves" or that "we talk about ourselves." I will try to give you a simple statement of fact:

THE IOWA IDEA.

About two decades ago some one coined the phrase, "The Iowa idea," and it was one to be conjured with. It was the theme for editorials in leading newspapers of the country, East, West, North, and South. If you will examine various magazines and periodicals of that date, you will find ably written articles prepared by some of the most prominent men of that period, discussing the thought

expressed in a certain paragraph of a State political platform. Verbal battles, condemning as well as defending the Iowa idea continued unabated for some time.

When the speaker was informed that he was expected to read a paper at this meeting on the subject of the Iowa idea, he wondered what relation there was between that 20-year-old political expression and the education of the deaf, or in what way discussion of that theme could possibly interest you. Before beginning the paper he wrote several letters asking for information, because he really thought he was to make an educational talk—not a political speech; that he was to discuss some phase of education—not the tariff. The answers were very interesting because they presented a new idea about some things that are being done in Iowa. They also impressed him with the thought that Iowa is doing some things that are not being done in many States, or at least that have not been done in so large a way. These suggestions form the basis of this paper.

Twenty-five years ago the General Assembly of Iowa created what has become known as the board of control of State institutions. At that time there were 17 State institutions supported by public taxation, 15 of them being governed by as many boards of trustees. The other two, the penitentiaries, were under the control and supervision of the general assembly and governor. I believe you will be interested in the following quotation from the statute:

"The board of control shall have full power to manage, control, and govern, subject only to the limitations contained in this act, the soldiers' home, the State hospitals for the insane, the college for the blind, the school for the deaf, the institution for the feeble-minded, the soldiers' orphans' home, the industrial home for the blind, the industrial school in both departments, and the State penitentiaries."

You will notice that the State institutions of higher learning, namely, the State University of Iowa, the Iowa State College of Agriculture and Mechanic Arts, and the Iowa State Teachers' College, were not placed under the control of that board. For many years each of these continued to have a governing body of its own.

Strange as it may seem to us to-day, there was considerable opposition to the plan of placing these 14 institutions under a single board. The benefits of the law more than justified its creation, and, as a result, the system has received the enthusiastic support of the people of the State. Within a few years the statute was borrowed by other States and in every case the plan has resulted in economy and efficiency.

Those of you from Kansas may be interested to know that your original board of control was borrowed from that statute.

Meanwhile the State institutions of higher learning grew in attendance, power, and influence. A few brave men asked the question, "Why should not these institutions be under one board?" Finally a legislative committee was appointed to investigate educational conditions, to study the said State institutions of higher learning, and to submit a report of its findings to the next general assembly. This was done. After about six years of discussion, the legislature created the Iowa State Board of Education to be the governing body of the three State institutions of higher learning. Since July 4, 1909, all of the State institutions of Iowa have been under the supervision of two boards. To consolidate 15 boards of trustees into 2 boards in 11 years was making changes rapidly. When the Iowa State Board of Education was created, the Iowa College for the Blind and the Iowa School for the Deaf were under the supervision of the board of control.

Some time after the organization of the State board of education, the blind and the deaf, as well as their friends, started a movement to have the management of the Iowa College for the Blind and the Iowa School for the Deaf transferred. They affirmed that both of these schools, being purely educational institutions, would fare better under the board of education. There were other plans in their program. This agitation found much cordial support throughout the State, and in 1911 a bill was introduced into both houses of the legislature authorizing the transfer of both institutions from the board of control to the board of education, with the result that the college for the blind was placed under the authority of the latter board. As soon as the bill was introduced opposition developed against the transfer of the school for the deaf because of the so-called 5-mile limit, which for many years attracted much attention in the State of Iowa.

The members of the State association of the deaf did not become discouraged. Within a few years several parents of deaf children and others interested in their education began to take an active interest in the State school, and particularly in the question of day schools. Meanwhile those persons began an agitation looking toward the transfer of the school, and the enacting of a measure for the creation of day schools. While the association of the deaf indorsed the first part of the program, it was opposed to the rest of it.

Now when I am speaking about this history, please remember that it is purely history; nothing of my interpretation, and no criticism excepting in so far as history might be critical.

Nothing could move their adherence to the combined system. Many members opposed the program for day schools on general principles, believing that the school at Council Bluffs offered superior advantages for the education of the deaf child. What was to be the outcome? Would the State association of the deaf openly fight the parents' organization and thereby oppose the program to request the general assembly to enact a law that would provide day schools? Dr. J. Schuyler Long, principal of the Iowa School for the Deaf, answered these questions in a paper that he read at the State meeting of the deaf in August, 1922. In discussing these same questions he stated:

"This organization (parent-teachers' association), was composed of prominent influential men and women. With their help, the deaf could gain much. Alone, they were at a disadvantage. If they could get together and find a common ground to stand upon, it might be to the advantage of both. When it came down to principles, they were both working for the same end, i. e., the better education of the deaf.

"Fortunately we had a president with a level head. After consulting with others of the association he decided that diplomacy was the better way. His first step was to call in the aid of the president of the national association, Dr. J. H. Cloud, and its ex-president, J. C. Howard. These gentlemen began a correspondence with the leaders of the parents' association, with the result that they saw things from a different angle. There was another side to it which they had not considered. They were reasonable and willing to see it. The result was that their views were modified.

"When the legislature met the next winter, the Iowa Association of the Deaf and the parents' association were found working in harmony. The Iowa association did not favor day schools, but a compromise was reached whereby they agreed to support the plan for such schools, provided they were placed under the jurisdiction of the State board of education. The idea of making the school at Council Bluffs an oral school by law was quickly dropped.

"The result of their united efforts is well known. In 1917, the general assembly transferred to the Iowa State Board of Education the management of the State School for the Deaf, and the same legislature enacted the law that provides for day schools. Thus the two associations, by working in harmony, secured both objectives.

"At that time the thought was expressed to members of the general assembly that the day schools would become feeders to the institution at Council Bluffs. The State board of education is endeavoring to make the course of study in day schools identical, as far as possible, with that of the State school, so that when pupils from the former go to the latter they will be prepared to continue their work without interruption.

"Thus working together the members of both associations came to know each other better, mutual respect and confidence were established, differences were smoothed over, and much more has been accomplished by united effort than could have been done otherwise. The Iowa idea of having the State school and the day schools work together, of the association of both the deaf and the hearing, of the use of diplomacy and the acceptance of compromise has won and done good, while a hostile attitude would have done harm and hurt the cause of both. This good feeling between the two bodies has continued uninterrupted, and I trust it will always continue. We may not agree on certain details, but each side is willing to listen to the other and both try to reach a common ground of understanding.

"We know," continued Doctor Long, "that in some instances an association of the deaf has worked in opposition to the other interests, and has made open war on the day school and the oral method, assuming that its advocates are their natural enemies. Such an attitude is wrong. The deaf themselves can not possibly be more interested in the education of deaf children than the parents

of those children. Both at heart desire the same thing. Why not work together, using persuasion and argument? If your cause is just, such a course will advance it much further than unreasoning opposition. After all, will not the wishes of the parents be given more consideration by an unprejudiced public?

"Fight for your convictions, support the combined system with all your ability and power, but be reasonable. Remember that your opponent is just as honest in his convictions as you are.

"There are those in this audience who would doubtless like to fight the oral method who do not really know what that method means, and who would cry 'down with the day schools' without looking into the reason for them.

"The Iowa idea of getting together has avoided the bitterness that has marked the efforts in other States. It has accomplished much for the deaf child and the cause of the deaf in the State of Iowa.

"The school at Council Bluffs and the day schools are on friendly terms. The school at Council Bluffs offers some things that the day schools can not, and from the day school to the State school is the natural order."

How much the experience of other States guided the framers of the Iowa law for day schools I am unable to state. Undoubtedly those who were responsible for the measure avoided pitfalls that were contained in the laws of other States, and at the same time drafted the bill so as to compel cooperation between the State school and the day school. The important provisions of the law are as follows:

1. That the instruction given must be substantially equivalent to that given to other children.
2. That a subsidy of \$20 for each child, between certain ages, be paid by the State.
3. That the State board of education shall have general supervision of all matters arising under the law, and that no instructor shall be appointed and no courses or methods of instructions shall be installed without the approval of the said State board of education.

Whatever may be the reason, experience has demonstrated that the State school for the deaf has shown a sympathetic attitude toward the day schools, and in every way possible the most cordial spirit of cooperation exists. Harmony between the two is emphasized by friends of both. At no time has there been an attitude of "armed neutrality"; neither has there been any evidence of an attitude of hostility. Experience has convinced the people of the State that both institutions are an integral and necessary part of the great educational system. While in a State like Iowa the field for day schools is limited, because there are not many large cities, yet the importance of those few schools is just as great as it would be if the number were doubled and trebled.

In reality, the amount of supervision that the State board of education exercises over such schools is limited. While the power of the board is large, the management of the schools, as far as possible, is left to the local school board. Thus far the State board of education has requested school corporations to observe the following conditions:

1. That the teacher of the deaf be well trained and that she shall have had a few years of successful experience.

In other words, if a teacher whose qualifications are not very good should be chosen by the local board, the State board of education has the power to veto the appointment. While the board could go ahead and employ the teacher, we would refuse to pay the subsidy, and that is where the authority of the State board of education comes into play.

2. That the oral method be used exclusively.
3. That the number of pupils in a class be few.
4. That the room be proper in all respects.
5. That proper equipment be provided.
6. That such reports be made as may be required.
7. That, as far as possible, the course of study be comparable to that of the State school.

On the other hand, the State board of education has shown every willingness to assist those schools and to cooperate with them. The superintendent of the State school and the secretary of the State board of education are requested to visit those schools at least once in two years. The teachers of the schools, as

well as the local school authorities, are anxious for the superintendent of the State school to criticize the work in a constructive way and to offer suggestions.

The following financial comparison may be interesting. For the fiscal year that began July 1, 1917 (the first year that the institution was under the supervision of the State board of education), the State appropriations were as follows:

Support and maintenance-----	\$59,400
Specials-----	6,750

The attendance for the same year was 182.

For each year of the biennial period that will begin July 1, 1923, the State appropriations will be as follows:

Support and maintenance-----	\$142,000
Specials-----	35,500

The attendance last year was 252.

At the time the management of the institution was transferred, facilities for housing children were ample; and at the present time more pupils than are enrolled could be taken care of in the dormitories. Existing conditions, however, make segregation of smaller children impossible. The desirability of separating the younger children from the older ones impressed itself upon the members of the board with the result that the general assembly made an appropriation of \$50,000 for the purpose of constructing a cottage for small children. The building is practically completed and it will be ready for occupancy when school opens in September of this year. The cottage is located so far away from the main building that the two groups of children will not be together.

For many years institutions of higher learning have made provisions to assist a few worthy and deserving young men and women to secure an education. This policy is well established; and each year hundreds of young people, who have received financial aid from the institution or from some philanthropic educational society or organization, are graduated from colleges and universities. Everyone admits the wisdom of the plan.

If young people, normal in all respects, are helped in this way, how much more are those who are handicapped entitled to similar aid? If financial assistance is needed by the hearing young man in order to complete his education, how much more deserving is the deaf boy or girl? One phase of the Iowa idea is to offer similar opportunities to a deaf person who is anxious to attend Gallaudet College or some other institution for the purpose of securing an education.

At the time the Iowa School for the Deaf was transferred to the State board of education, the income was on a per capita monthly basis. This plan of making appropriations for that institution had been followed for many years. In many States, I believe, this is the common way of making appropriations for such schools. I wonder, however, if it is a good method, or if in the final analysis it is defensible. In general, do the laws of the several States provide that the tax for the support and maintenance of public schools shall be levied on a per capita basis? Do legislatures make appropriations for State institutions of higher learning in that manner? If revenues for these institutions are not levied or appropriated on the per capita basis, why should special schools such as those for the blind or for the deaf be maintained by that method? Is it not a cumbersome and an antiquated system? Does it not tend to prevent the securing of the best results educationally, and to interfere with efficient business management?

Appropriations for these schools in Iowa are made in the same manner as those for the two colleges and the university, the general assembly making flat appropriations for support and maintenance for each year of the biennial period. The friends of the deaf feel that this method is a distinct gain over the old one, and that it is promoting business economy and educational efficiency.

COMPULSORY SCHOOL LAW AND EMPLOYMENT OF A STATE AGENT.

For many years prior to 1917 Iowa, in common with other States, had a law requiring all deaf and blind children between certain ages to attend the proper school. Like many other measures it was not enforced. About six years ago a new law went into effect which has produced more satisfactory results.

To that measure is due part of the credit for the increased attendance at the State school for the deaf. Under its provisions the State board of education appoints a person to visit parents of deaf or blind children that are not attending a proper school. As a rule, she is able to convince the father that he should have

his child educated. While the law has been quite satisfactory, time and experience discovered a defect. This was remedied by the last general assembly. If the parents refuse to send a child to an approved school, the secretary of the State board of education, after July 4, will report the case to the judge of the district or juvenile court having competent jurisdiction.

According to the amended statute, it is the duty of the court to investigate the case, and if he finds that the child is not being properly taught, he must commit it to the State school for the blind or deaf, as the case may be. Should the parent refuse to comply with that order, you know what will happen. He would be guilty of contempt of court.

We expect good results from the new law. The provisions should secure the attendance of all blind or deaf children between ages of 5 and 19 years in proper and approved schools.

What does Iowa prize most highly? The general welfare of her citizens. How is this to be secured? Through the school and the means of education. In these days of world-wide uncertainty, the people of that State realize more and more that in education lies the hope of stable government.

During the past few years school attendance has increased enormously. It is a source of great pride to every Iowan that the most recent statistical analyses from Washington reveal the fact that in proportion to the population there are more children between the ages of 5 and 18 in the public schools of that State than in any other American Commonwealth; and the same is true of the enrollment in the high schools and the colleges. Twelve years ago there were 35,000 boys and girls in the Iowa high schools; during the past year the number was 88,000. Parents want their children to be educated. They have uniformly voted higher taxation directly upon themselves to care for this growth, in the matter of buildings, equipment, and teachers. They have scrimped in order to give their children an education.

Is this a new idea for Iowa? No. As a matter of fact this interest in education has been with us from the beginning. The ordinance of 1787 provides that "religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged." This fundamental principle forms an essential part of the State constitution.

The Territorial legislature that convened in January, 1839, established seminaries of learning. The constitution made specific provisions for schemes of education, beginning with the elementary schools and extending to the universities. The first act of the first general assembly of the State related to the providing of funds for schools. The Iowa pioneer people believed in education.

The State owes much to men like Mr. J. B. Grinnell for developing a program in the legislature for the free public-school system, beginning at the bottom and going to the top. Listen to the lofty words of the commission which reported in 1856: "Here, for the first time, a great State, situated in the center of a mighty Nation, possessing exhaustless resources of agriculture and mineral wealth * * * demands a system of public instruction adequate to the full development of its great resources, and of the intellect and moral power of its people."

What does the State owe to the handicapped children, and what should the State do for them? From what has been stated, you no doubt anticipate what I will say regarding the relations and obligations of the State to such children. No one in this country calls the public-school system a charitable institution. Neither are the pupils of such schools considered objects of charity. Unfortunately, there are people who refuse to send their children to the public schools. Some of those parents do not want their children to mingle with the masses. For them the public school is too common. Such people deserve our severest censure. They are undemocratic. Their ideals are not the ideals which were proclaimed by our forefathers and which have been bequeathed to us as a rich and priceless heritage.

In many of the larger cities, the midday lunch is provided for the children, either free or at a nominal cost. People demand all of this, and the State approves it. Whatever the State owes to the hearing child, it owes none the less to the deaf child. It can not escape this responsibility. Society, when fully informed, will emphatically insist that superior opportunities be offered children who are handicapped. Whatever advantage the State offers to a hearing child, must not be denied to his deaf brother. No educational limitation must be permitted; no educational discrimination must be tolerated. What is done for one must be done for the other. This is the heritage of every American child. To do less is not in keeping with the American ideals of justice. We must not, like many other nations, educate a part of our people and neglect the rest.

It would be odious to the people of Iowa for a deaf child to be considered an object of charity. Such an idea is foreign to their thought and vision. They insist that such a child be regarded the same as the other members of the family, with one difference—that, unfortunately, it is handicapped. They insist that it is the duty of society to remove this handicap as far as possible by offering such a child superior opportunity. The State must not permit the deaf to be looked upon as a strange class. Society must assume its responsibility; and it must, by educating the deaf, demonstrate that they are self-supporting and a part of a community. Our laws regard the deaf exactly as other people, and since the deaf child is a part of society, the State does not permit the idea of inferiority to prevail.

In an article which Prof. Edward Allen Fay, of Gallaudet College, wrote for the United States Commissioner of Education in 1913, appears the following:

"When the first schools for the deaf were opened in this country, nearly 100 years ago, they were regarded as charitable institutions, although their purpose was educational. They owed their existence to the contributions of charitable individuals. They were modeled after the European schools; and at that time not only schools for the deaf, but all schools in Europe, except those for the wealthy, were charitable institutions. In America, however, the duty of the State to provide free schools for its children had already been recognized; and the supporters of the schools for the deaf were not slow to perceive that their pupils had the same right as other children to be educated at public expense."

It will be a great boon for the deaf when everywhere they "are looked upon no more as a distinct and different portion of the race, but entirely as normal creatures, equally capable and human as all other men." All false, erroneous, and embarrassing notions must be dispelled.

A number of years ago several members of the State board of education noticed that there were, in various parts of the State, quite a number of children suffering from diseases, maladies, and deformities which might be remedied or cured if given proper treatment and hospital care. In most cases the parents or guardian were not financially able to pay the expenses. Considerable study was devoted to that problem, with the result that more than eight years ago Mr. W. R. Boyd, chairman of the finance committee of the Iowa State board of education, wrote a bill which was introduced into the senate by Hon. Eli C. Perkins. After considerable discussion and amending, it was passed almost unanimously. The measure became a law on July 4, 1915. It provides free medical or surgical treatment and care, in the hospital of the college of medicine of the State University of Iowa, for any Iowa boy or girl who is "under 16 years of age and who is afflicted with some deformity or suffering from some malady that can probably be remedied," and whose parents or guardian are unable to provide means for such treatment and care.

From the first the general assembly and the people were imbued with the spirit of the work which the measure sought to accomplish. The undertaking has retained the interest of the legislators and people of the State, and the results have far more than justified the enactment of the law.

Under its provisions 13,278 patients were admitted to the hospital from July 5, 1915, to May 1, 1923. The results have been remarkable. Many have been completely cured. With scarcely an exception all have been helped. Children suffering from hideous facial deformities have been made so they will no longer be marks for derision or pity. Such facial defects are frequently more repulsive than crippled limbs, and persons afflicted are cut-off from almost all human associations. Many boys and girls who have never gone to school because of badly split lips were able to go out into the world and take their places in society after they had been at the hospital for treatment and care. The law makes special provision for the treatment of the pupils of the school for the blind and for the deaf by the specialists employed in that hospital. Verily, the maimed and the halt have been made to walk; the deaf to hear; and the blind to see.

The benefactions of this service have not been confined to the ultrapoor, for it is recognized that in many deformities the cost of a hospital course of treatment of such length as may be necessary—to say nothing of the surgeons' fees—is such as to put it beyond the reach of the parent who receives a fair salary.

Just a word there of explanation. The theory of the law is that it is nothing more than a school. It is not in any sense charity. The purpose of the law is to take these crippled and diseased children and to make of them strong men and women physically, if that is at all possible.

The natural outgrowth of the Perkins Act was the passage, four years ago, by the general assembly, of another law, which in effect, extends the provisions of the earlier measure to adults, thereby enabling any person over 16 years of age to be accepted for medical or surgical treatment and hospital care at the expense of the State, under restrictions similar to those imposed by the Perkins statute. An evidence of the growing popularity in which the people of Iowa held the children's law may be seen in the fact that the measure for adults passed the general assembly without a dissenting vote.

The Haskell-Klaus law went into effect July 4, 1919. From that day to May 1 of this year, more than 6,000 adult patients were admitted to the hospital.

As an evidence of Christian charity such work as this is meritorious, but the people of Iowa can judge the success of the Perkins law and the Haskell-Klaus law selfishly, if they wish, rather than from the viewpoint of those whom they have helped. Those little children as well as the grown men and women are reclaimed for society. In ancient Greece, where physical perfection was especially esteemed, invalids and cripples were cast into the mountains and left to starve. Iowa has found a better way.

The State offers to those persons the opportunity to become physically fit, and when they are made normal, or nearly so, after a few weeks or months in the State university hospital, their whole relationship to life is changed. Instead of demanding support, they care for themselves; instead of being dependents they are made to be independent; they are changed from liabilities to assets; they become useful instead of helpless; they have productive worth in themselves and have released others who were formerly devoted to their care.

The thirty-seventh general assembly, which convened in January, 1917, created what is known as the Iowa Child Welfare Research Station, part of the statute being as follows:

"That the State board of education is hereby authorized to establish and maintain at Iowa City, as an integral part of the State university, the Iowa Child Welfare Research Station, having as its objects the investigation of the best scientific methods of conserving and developing the normal child, the dissemination of the information acquired by said investigation, and the training of students for work in such fields."

The State appropriation for this work is \$25,000 a year, and this fund has been augmented by a special gift of \$50,000, distributed over a period of five years, by the Woman's Christian Temperance Union and by an annual appropriation of \$7,500 for three years by the Laura Spellman Foundation.

That happens to be the only institution of the kind in the United States that is supported by public taxes. There are some privately endowed research stations but not any supported by the public.

The research fields include investigations regarding the physical development of children with special attention to the relationship that exists between the actual physical development of children of school age as compared with their mental development measured by school progress. Broadly speaking, it has been found that children who develop rapidly physically reach their mental maturity at an early age.

Research work is being done in the field of nutrition in connection with the children in the Perkins Hospital. Considerable investigation has been made in the field of chemical metabolism and in the direction of determining the relationship that exists between food and sinus disease as well as rickets. Tens of thousands of bulletins on infant feeding have been distributed.

Studies are also being made to determine the relationship that exists between the size of the family and the development of the children socially, physically, and intellectually. The transmission of hereditary traits is receiving considerable attention in the laboratory. Other interesting and no less important investigations and studies are being made at the present time.

Four years ago the legislature enacted what is known as the State psychopathic hospital law. To this institution are sent, for care and treatment, a large number of persons who are afflicted with abnormal mental conditions. The psychopathic service is an expression of a desire, on the part of the State, to give serious attention to the early stages of mental diseases, not only from the standpoint of diagnosis, classification, and treatment, but also in the matter of scientific research with regard to the causes and cure of mental disturbances. By no means is this a custodial institution. Patients are not admitted if known to be hopelessly insane, nor are they permitted to remain if they are found to be incurable. Thus far the average term of treatment of patients is approximately

30 days. From July 4, 1919, to May 7, 1923, 905 patients have been treated in that institution. Of this number a large percentage have been cured or helped very materially. Who can estimate the magnitude and importance of this service? Our hearts are made glad when a crippled child is made whole. How much more should we rejoice when a diseased mind is restored to a normal condition.

That these laws—the Perkins law, the Haskell-Klaus law, and the State psychopathic hospital law—are among the most benign ever enacted by a sovereign State, is fully recognized by all who are acquainted with their workings. If anyone doubts their wisdom, a casual walk through the wards of the hospital, viewing the deformed and afflicted now on the way to health and happiness, is enough to convince him of the benevolence of such legislation, "And the leaves of the tree were for the healing of the nations."

The character of this work attracted the attention of medical educators, physicians, and surgeons throughout the country. About two or three years ago the general education board and the Rockefeller Foundation became interested in the institutions, with the result that they made considerable investigation regarding their needs and the likelihood of future influence on medical service and progress. After having made a careful investigation covering a period of about two years, each of those foundations duly authorized a free gift of \$1,125,000 or a total of \$2,250,000, to the State of Iowa for the development of this medical plant, such sums to be available immediately upon the formal acceptance by the general assembly of the gift and the appropriation of \$450,000 a year for five consecutive years. The last legislature accepted the gift and the money was appropriated.

It is not the wish of the people of Iowa to establish a great medical plant for that purpose alone, laudable as that would be, but, instead, it is their ambition to have the State take its place at the forefront as a benefactor of the human race and as a practical exponent of the highly educative rank of its citizens. The motto is "Service."

Several years ago when I was visiting an institution for the blind located in the eastern part of the United States, I was surprised to have the superintendent criticize State educational institutions, especially the management, because, as he said, of political influences. His school had a large endowment fund. He told me with pride about his being entirely free from political influences, which he said could not be true of a tax-supported institution. He was under the impression that a board of trustees of a school for the blind or a school for the deaf was very likely to change superintendents with every political upheaval. True, such things have happened and without doubt will happen again. Such conditions are most unfortunate and they are deeply regretted by most people. The fact that so many of the best citizens denounce such changes is a decidedly healthy symptom, because it shows a determination on the part of the American people to keep educational institutions free from political domination and control. But why criticize the management of State educational institutions only? Have you ever observed that executives of endowed institutions have been changed without a very good reason? Do not forget that there are other sinister influences in this country besides the politics that it is so popular for some people to denounce.

During the life of the board of control and of the State board of education, no man has been elected to an important position or dismissed from the faculty because of his political affiliations. The people in my State would not permit the State board of education to elect a man because he was a Republican or a Democrat or to drop a professor for the same reason. Such conditions would be unthinkable and intolerable in Iowa. The State institutions are as much divorced from politics, local, State, and national, as any independent college there or elsewhere. Whenever a vacancy occurs, either in the position of an executive or in the faculty, the entire country is a field to select from.

The people of Iowa have an abiding interest in their educational institutions, and they are justly proud of them. Under no conditions would political domination or interference be permitted. Regardless of the ticket voted by a vast majority of the people, they are united under at least one banner: "Keep our schools free from all kinds of politics."

The president of the State university was born and reared in Indiana. After he had taken an advanced degree in an Eastern university, he was elected dean of the college of education of the State university of his native State. After he had occupied that position for some time, the Iowa board offered him a similar place in the State university, which he accepted, and a few years later he was unanimously elected president of that institution. The president of the Iowa

State College of Agriculture and Mechanic Arts was born and reared in the East. For a number of years he was a professor in Cornell University, Ithaca, N. Y.; and later he was secretary of agriculture of that State. The superintendent of the Iowa School for the Deaf, as you know, was an Eastern man; and at the time he was offered the Iowa position he was superintendent of the school for the deaf at Rome, N. Y.

This is a simple statement of the spirit of the so-called Iowa idea, as your speaker interprets the ambitions, aspirations, and ideals of the people of that State. It stands for the elimination of ignorance, prejudice, and superstition; for the care of those suffering from diseases, maladies, deformities, or abnormal mental conditions; and for promoting the general welfare of her people.

Miss CONNERY. As our time is limited this morning, I will ask that you defer asking Mr. Gemmill any questions till the end of the program.

Miss Nettie McDaniel, principal of the Georgia School, is going to tell us about some projects which she has worked out in her school.

ADDRESS OF MISS NETTIE McDANIEL, GEORGIA SCHOOL.

(Miss McDaniel illustrated her address with many beautifully made posters.)

Miss McDANIEL. Madam Chairman, ladies and gentlemen, I have a mountain friend who when greeted by the question, "Good morning, how are you and what have you been doing this day?" invariably replies, "Porely, porely. Well, I have just been a projectin' around." And then he launches off into such a detailed account of his doings that he soon finds that his audience has disappeared. I, like my mountain friend, have been projecting around, but for fear that I shall be left in the same predicament as he, I shall proceed at once to my subject of projecting.

I have found the project method especially adapted to the teaching of the deaf, since it makes the subject very concrete. The subjects I am to touch upon this morning are grouped around the sand table, and the first chart I present is a toy shop.

When the time comes in language work for the classification of nouns under the head of proper names, clothing, dishes, toys, etc., an interesting project can be exemplified in the planning and making of a "toy shop." It is an excellent way to teach the names of the toys, and these toys before being mounted, can be used in the classroom in an improvised shop, thus dealing in buying and selling. Conversational language is used; toy money or real money is handled and change made; stories composed; arithmetic problems made up; and written names of toys are taught.

This chart [indicating], a toy shop, was drawn by a boy of low mentality who sits in the sixth grade. The pictures of toys were cut out and mounted by the pupils of the third grade. In making these toys for classroom use I would use larger toys than those shown on this poster. These could be mounted on a three-section poster and brought out whenever needed.

The aim in this project is to teach the names of toys, and the subjects brought in are conversation, language, arithmetic, art dramatization and spelling.

The next project (another chart), "Paul and his dog," is an original story written from this picture [boy and dog]. There came out in the Saturday Evening Post the picture of a small boy administering to the needs of his sick dog. The fifth grade was asked to write a

story about this picture. A number of original stories were handed in, but I have only one with me, which I shall not read, since the poster illustrates the points the boy has touched upon in the story—"We have a fine dog. He drives the cows to pasture night and morning. One day he failed to go with the cows. The dog was found sick in the barn. The boy got some castor oil and gave it to the dog and wrapped him in a blanket. Next day the dog was well and came to the kitchen for something to eat."

The aim in this project was to cultivate imagination, to form the habit of organizing thought, to furnish an opportunity for using language construction, spelling, paragraphing, punctuation, and capitalization.

The next project [showing poster] is a poem "The Lamplighter," by Robert Louis Stevenson. The sixth grade read the story through—the poem through—as a whole, then drew pictures illustrating each thought in the story. Then they dramatized and reproduced the poem.

A project that has furnished most useful language construction and language drill in the Georgia School for the Deaf is the doll house. I couldn't bring one with me, so I shall have to tell you how it is made and its use. Four of these doll houses were made in the shop, the boys assisting in the making. The houses are 5 feet by 3 by 16 inches deep, with a roof and chimney. Some of the furniture, rugs, etc., was made in the arts and crafts department. The members of the family were dressed by the girls. The mattresses, pillows, bed and table linen were also made by the girls.

Doors were cut in the partitions and stairways lead from floor to floor. There are halls, a porch, a bedroom and closets, a bathroom, a parlor and library, a dining room, a kitchen, and last, but not least, a pantry with its wonderful shelves for the jams, pies, and candy that the small boy in our story books gets into so much trouble over; many times in teaching these stories have I labored to give the pupils an idea of the pantries at home and have failed. But with the pantries in the doll house there is an easy explanation to those old stories.

The doll house is used in teaching the language of the home. It gives pupils an opportunity to do the housework and tell about it. There are the beds to make, the dishes to wash, the milk to churn, the fire in the real stove to make, the pans to put on the stove, the kettle to fill, and the water to bring. We send a child upstairs to rock the baby, to the library for a book, and to the kitchen to get a broom from behind the door. For language work there is no end to its usefulness. For teaching the use of the tenses it is a joy. The prepositions are all used "in, under, out of, across, above, and behind." Everything in the house is illustrated.

In lieu of the doll house, I have brought with me some rooms of the house, which could be made useful just at this period in teaching the names of the rooms of the house and the furniture for them. We have an exterior view of the house, and on this lawn could be planted shrubbery and flowers.

Then we could have the hall with the dog expecting his mistress to come down the stairs. Then could be added the parlor, the library, the dining room, the kitchen, with the refrigerator filled with good

things to eat. Then we could have the cook in the kitchen and the chicken baking in the oven.

Then we have the family room with the baby learning to walk. Then the young ladies' room with the wardrobe filled with clothes. Then we have the guest room and the bathroom.

The walls of these rooms are painted, but wall paper could be used just as well.

Along with the doll house I have a farm table represented as being near a city, which gives untold opportunities for language of the farm. The pupils can feed the pigs, the chickens, and the cows; can plant a garden in a sand pan and in a few days gather vegetables for the table. The mail carrier comes to the mail box; the street car runs near by; the policeman rides near, to the joy of the small boys. The milk wagon comes for the milk and the baker delivers bread. The cows are in the pasture, the pigs in the pens, the horse in the barn, the dog is in his kennel, and the cat on the front porch.

Time does not permit me to go into further detail, but you can see how many topics the house and the farm furnish a stimulus for.

(A chart showing Japanese life was next presented.) Later on in the intermediate grades we begin the study of geography, taking the world as a whole; as part of that work the races of men are studied. The first races we introduce are the white, the black, and the red races. Since we can get a more natural setting in these races, and since the natural setting is essential to a project, the study of these races should precede all others. Following this we take up the yellow race, and the Japanese of this race are very interesting to children. The teacher can interest the children in the Japanese by showing pictures, by conversation, by reading, by questions, and by studying topics teaching everything pertaining to Japan. The customs, manners, schools, religion, products, etc., are studied. Games are played and stories are written about these subjects. Through these correct representations are given the pupils. Then as a climax the country of Japan is worked up on the sand table. To get the necessary material for the sand table the pupils are sent to the art room. The teacher of art is prepared for them, for her work is to correlate the work of the grade teacher.

From the art room we get a house built of bamboo, with a sliding screen, the head rest, the tea table, the mats, the Japanese umbrellas, the flowers, and the Japanese figures dressed in Japanese costumes. These are arranged in an interesting way on the sand table. The bridge spans a winding stream. The flowers grow along its banks. The flower garden is filled with plants and shrubbery among which the Japanese with their bright-colored umbrellas walk daintily. Occasionally a jinrikisha passes by. A pagoda and the sacred mountain are ever before us.

The study of the Japanese completed, the class calls for Japanese tea. The tea is prepared, invitations are sent out, the lanterns, kimonos, and cushions are borrowed, the flowers and fans are made in the arts and crafts department, the rice and tea are bought and paid for, and the day arrives for the fete. Under the soft light of the lanterns the guests are received by the girls dressed in Japanese costumes. A profound bow is given. The rice and tea are served, and games are played for the entertainment of the guests.

These posters [showing posters], reproducing somewhat the scenes on the sand table, were made by the class of the sixth grade. The background and the mountains were drawn in pastel crayon. The flowers were painted—cut out and painted on; also the figures of the bridge, the Japanese jinrikisha, and the Japanese figures. The house is shown with a sliding screen.

One would think that after working out a project like this the things learned about Japan would never be forgotten, for the interest has been so keen all the way through. Geography, reading, arithmetic, spelling, composition, religion, nature studies, dramatization, and domestic science were used in this project.

The next project chosen is the Eskimo. [Posters of Eskimo land were shown.] We go from the artistic country of Japan to the bleak but interesting country of the Eskimo. The Eskimo project is worked up in the same manner in which we worked up the Japanese.

This subject the pupils have illustrated more in poster style, since the country admits of that. The drawings [showing posters] were enlarged from small pictures; the animals, sled, and other things were drawn free-hand, cut out, and mounted. The northern lights were made from different colored papers arranged to give the effect shown. In the schoolroom the teacher developed Eskimo land on the sand table, making the huts of sand and representing the snow with flower and diamond dust or with coarse salt, a very thick coating of coarse salt. The toy beds, foxes, and dogs were found in a toy shop; the snow sled, harness, and whip were made in the handicraft department. Ice is represented by glazed paper. The effect on the sand table is really very beautiful.

The pupils look forward to this work on the sand table and poster work as a climax to their study of the subject in hand. So they are interested in the subject throughout, knowing that these are going to follow.

At the appropriate season we take up the study of cotton. Cotton grows within half a mile of the school. We visit a cotton patch, a cotton gin, a cotton factory, if possible, or show pictures of a cotton factory. We see cotton in all its stages of development into the finished product. We learn what is made from cotton; we have samples of the boll, seed, and hull, meal, a bale, cotton ready for comforts, mattresses, thread, twine, paper, etc.

There are so many interesting topics to be worked out with this project that much time and thought are required. The subjects brought in are geography, products of cotton, cotton ginning, cotton mills, paper mills, dyeing of cloth and thread, cotton oil mills, etc. All the while the pupils are reading, spelling, and doing arithmetic and language work.

In making the posters there is an appeal to the artistic sense. There are no stories told dearer to the heart of the southern children than the stories of the cotton field, of the pickers of the cotton as they move up and down the cotton rows singing their songs.

I have endeavored in this brief time to demonstrate some of the projects worked out in the Georgia school. Some of the best projects that we know and that we employ are the real housework, the real farm, the real garden, the real flower beds, to all of which we have access in Georgia.

I thank you.

Mr. E. McKAY GOODWIN. I would like to ask a question. In what grade of work, for instance, do you develop the idea of Japan?

Miss McDANIEL. In the fifth grade, sometimes the sixth.

After studying the world as a whole we take a part of that work, the races, and the fifth and sixth grades work up this project.

Mr. GOODWIN. I approve, very heartily, the plan. I believe very excellent results can be gotten from it, and in your last analysis of cotton I thought if you had only brought a boll weevil it would have been complete. [Laughter.]

Miss McDANIEL. I have a picture of a boll weevil right here [indicating]. I was afraid to bring the weevil over into Canada.

Miss CONNERY. Miss McDaniel's paper will now be discussed by Miss Van Adestine, principal of the Detroit day school.

Miss GERTRUDE VAN ADESTINE. In the discussion of Miss McDaniel's paper, which was assigned for my consideration, I find that I can add nothing to the paper. It has covered the subject so completely and in such an excellent manner that it leaves nothing to be added by way of embellishment.

However, I might add to this general topic a few remarks regarding projects which we have worked out in our own school, and I will go on from the grades in which Miss McDaniel does her work into the grammar grade.

I have used an arithmetic project with a grocery store—not a toy shop, but a grocery store—with food from the kitchen. Where we could not obtain food from the kitchen, we have obtained the empty boxes and made believe that they contained the food. We have used real money. We have ordered kitchen supplies and paid for them out of bills of different denominations and have accounted for the change. We have taken turns in being the salesman and the customer. We have ordered food for different meals and have provided for meals for different members in the family—that is, families of different sizes.

We have bought and sold milk, which we brought from the kitchen, and have learned the meaning of profit and loss.

I prefer to use real money for the reason that it is a greater incentive to handle the real money. The children learn to count money quickly, and they soon detect an error, especially if they are the customer and the salesman has made it. On the other hand the salesman must account for all that he has, so he is very careful to make a strict accounting.

So much for the arithmetic project. It has worked out wonderfully well. We have carried it into the lunches of the individual children; how much they should spend for lunches each day; how much they spend for candy and soda; how much they might save out of their allowance if they used a little self-denial and foresight. We have bought clothing for the pupils out of certain amounts of money; what they could buy, the quality of clothes, things that were necessary; as compared with things that were extravagant.

In the history and civic classes of the grammar grades we have worked out a different project along a little different line. These classes come together on Friday morning for an hour, or even less, if that time proves too long for the work in hand.

In this group the children learn the language and the usage of parliamentary law. They elect their own officers, president, vice

president, treasurer, and secretary. I might add here that the dues are 2 cents a week, which the children have for their own use on particular occasions.

This club takes up the study of civic responsibility and makes use of its knowledge in direct action in the school. They feel a responsibility for their conduct in the halls and on the play grounds and their coming to and from school on the street cars. They also feel responsible in some degree for the other fellow's conduct. Sometimes this, if not carried too far, is very helpful. However, we have to check on that.

It is the privilege of the club to provide after their fashion and with some direction from the teacher, for the entertainment of the children on certain occasions during the year. At Christmas time they entertain the small children of the school, provide their own program, to which each class is asked to contribute.

They have their own party at Easter time and an annual picnic.

That is the one occasion for a picnic during the year.

This year the individual responsibility that the children assume was brought home to me very clearly in an amusing way. A certain date was assigned for this picnic, which date conflicted with some other work that we were asked to do in a health exposition recently held in our city. This necessitated a change of date of the picnic, and when I was waited upon by a committee of the club and suggested to the chairman of the committee that a change of date would be necessary and the chairman took the message to the club, the response that came back was: "Well, Miss Van Adestine hasn't paid her dues as a member, therefore she has no right to vote in the club." However, I was able to persuade them that my suggestion was one they might better act upon, so they set another picnic day and had just as good a time, I am sure.

We have worked out the athletics with hearing children. We now have regular scheduled games of soccer ball in the fall and baseball in the spring, a regular schedule of games with other teams from the hearing schools in the different leagues. We hold our own always, sometimes better than that, with the hearing children in the games. It is the same with the girls. They have basket ball, pin ball, and indoor baseball.

Now I want to speak of projects that we have worked out outside of the school. They affect the interests of the school and the school has been able to lend a great deal of assistance to them. As Miss McDaniel's mountaineer friend said, we have been "projecting around," but we have gone outside the school somewhat to do it.

First of all we have been able to convince the school authorities in the city that we were deserving of a new school building, and after several years of most earnest discussion on our part and deliberation on theirs, we have succeeded in getting a building which is now in process of erection. I am more hopeful and anticipate a greater degree of pleasure in the new school when I see the wonderful new building here. We have needed relief along this line for some time. I may say that the new school is the result of the generosity of the school authorities and united action on the part of the school staff and the parents association and other people who are interested in the welfare of deaf children.

We have in our school, as you know, children who are totally deaf and children with hearing so defective that they must come from the grades in the public school to the school for the deaf. For some time it has been a problem to properly classify the hard-of-hearing child and to give him the kind of instruction he needs when he needs it. For some time past it has also been our problem to get instruction to the deaf child before he realizes that because of his deafness he is a failure in the grades. So at the present time we are making a survey of the hard-of-hearing children in the city with the idea of forming classes in lip reading for the children whose hearing is only slightly defective, that they may have this training in lip reading and still remain in their own classes in the hearing school. We have conducted this survey for over half a year with very satisfactory results. One class in one of the large elementary schools has had this training work since last December. This class was in the grammar grade group. Beginning in September we shall have another class of children in the first grade. When we find that there are between 15 and 20 first-grade children in a school of 1,500 or 2,000 who have some hearing defect, it is a serious problem for the future of these children unless they have help then when they need it. So that is another project that the school for the deaf is undertaking at the present time.

Perhaps a keener consciousness of the limitations of the hard-of-hearing child—that is, what he will be up against unless something is done for his relief—was brought home to us by our experience in teaching lip reading to the hard-of-hearing adult. If the hard-of-hearing adult is handicapped because of lack of ability to lip read, how much more could be done for the hard-of-hearing child if he is given that training when he is in the grades, and still maintains his place with his hearing associates.

Now those are the three projects which we have accomplished outside the school: Getting a new school building of which we are justly proud; evening lip reading classes for the adult deaf, conducted the second year; lip reading classes in the public school grades for the hard-of-hearing children, beginning with the first grade and going through the grammar grades.

The future, for this work, holds many possibilities. We are full of hope and the results already attained have been more than satisfactory.

I thank you.

MISS CONNERY. Are there any questions on Miss McDaniel's paper? If not, we will go on with the program.

The next paper is on intermediate language, by Miss Croker, co-author with the Misses Jones and Pratt, of the series of language books with which we are all familiar.

INTERMEDIATE LANGUAGE WORK.

By Miss GERTRUDE W. CROKER, Gallaudet School, New York City.

When I considered talking about intermediate language work in the very brief time at my disposal, I think I knew a little how Mr. H. G. Wells must have felt when he contemplated writing his *Outline History of the World*.

I know that most teachers of the deaf consider primary work the most interesting, but to me there is no stage of the work more thrilling than the time when geography and history are begun, and the deaf child with his horizon

tremendously enlarged, reaches out for the new language which will help him to understand this new world he is so eager to learn about.

He must be prepared so that later on, when text-books are put into his hands, the language will be within his comprehension. To the narrative form of storytelling with which he has long been familiar must be added the descriptive form, not so familiar and much more difficult to use. The geographies and histories fairly bristle with sentences involving many new language principles—"In the northern part of New Jersey there are large beds of clay from which bricks and tiles are made." "More coal is mined in Pennsylvania than in any other State." "General Gage sent out troops to destroy some military stores which had been collected at Concord." Unless the children clearly understand the use of relative clauses, the passive voice, the perfect tenses and other involved language construction, they will never be able to use textbooks intelligently.

"Intermediate work" is such an indefinite subject, varying as it does in almost every school, that I am going to narrow it down to what is generally known as fourth, fifth, and sixth year work for the deaf.

In each of these years' work there are certain subjects which loom large.

The fourth year may well be called a participial year because that is where the emphasis seems naturally to fall. Of course the child is not taught that "The participle is used as the direct object of a verb or preposition" or that "The participle is used as an adjective before and after a noun," but he must become familiar with their use in these ways and in all other ways and be able to use them in his own spoken and written language. If the teacher is constantly on the alert to make use of the participial construction whenever the occasion arises, the children will soon be using it themselves without difficulty.

This is true of all new work. If the teacher has clearly in mind the work which stretches before her, and makes use as opportunities occur of all the new constructions which are to be taught during the year, much laborious work may be avoided. In this way the children have already begun to grasp the meaning of a new construction so that when the time comes for it to be taught they recognize it as a half-familiar acquaintance.

Direct and indirect discourse demands a large amount of time in this year's work. By the end of this year, beginning with the comparative degree though, of course, the drill continues on and on indefinitely.

Comparison of adjectives, too, is one of the big subjects. Only the simplest forms are given in this year, beginning with the comparative degree and toward the end of the year adding the superlative degree. Of course it should always be taught objectively, comparing objects in the room, the children according to height and age, and in any other ways in which comparisons can be easily made.

The passive voice may be begun toward the end of the year. I always dread beginning this subject because the children in their anxiety to use all their new language are so apt to use it in a strained and unnatural way. Certainly, "The blackboard was washed by me" is not to be commended, and yet the child was trying so hard to please teacher by using his new language. It seems to me that it is not wise to ask the children to give original sentences in the passive voice for a long time after it has been taught, and its use in journals and composition work should only be allowed where it sounds natural and pleasing.

It is one of the easiest subjects to teach to a class which has been brought up on the five slates. Even the dullest child can see that Mary, the subject in the first column, performs a definite action when she kisses Ruth standing in front of the third column. When we write the sentence in the new way, it is clearly seen that Ruth, the subject, does nothing, the action having been performed just as before by Mary, who now stands in front of the fifth column. All the passive forms of the verb should be carefully worked out on the blackboard, and a plentiful amount of conjugation must of course be done. Most of the new question work of the grade centers around the passive voice.

When we turn to journals and composition I am again reminded of the Outline History of the World. There is so much that might be said. Two periods a week may well be devoted to journals. This form of composition work certainly gives the children their best opportunity for self-expression, and in no other way can the teacher gauge so accurately how much of the new language taught has been actually absorbed by the children.

Long, rambling, uninteresting journals must be discouraged, and certainly no child should be allowed to write over and over about the same experiences. Anything stereotyped should be severely frowned upon. Frequently the journal period may be an oral one, supplying the best possible kind of lip reading. The

children should be encouraged to ask one another questions, and it will speedily develop into a lively conversational period.

The composition work in this year is varied. It may consist of stories written from a carefully chosen picture—a picture that suggests a story but does not tell it—or a suggestive opening paragraph. At this age many children have a lively imagination and they should be guided along the right lines. Occasionally it will do to let the children imagine themselves to be certain animals or people and tell their experiences, or the period may be turned into a guessing game, letting the children write on the blackboard descriptions of unnamed animals, persons, and things to be guessed by other children.

In the fifth year comes work on relative pronouns, the present perfect tense, and time clauses. Here we are helped by our geography and history subject matter. It is so much more interesting to give sentences about "The Eskimos who live in the land of ice and snow" or "De Soto, whose men buried him at midnight in the Mississippi River," than about "Johnnie, who lives in the next block," or "The girl whose hair is long and curly."

Of course, one's program is properly divided into language, geography, and history periods but the subjects so overlap that it is hard sometimes to tell just which of them one is teaching.

Let me illustrate. When we were studying in history about the Jamestown colony and about how the colonists sent a petition to King James setting forth their grievances, we wrote a petition to the principal of our school setting forth the fact that the window shade in our schoolroom was broken and troubled us greatly and asking that it be mended. Then we voted for some one to act as our representative to carry the petition to her. (Needless to say word came back immediately that our petition was granted.)

The lesson, which proved to be a very profitable one, was certainly a combination of history and language. The children grasped the idea of what a petition was and of the meaning of representative, and added several important new words and phrases to their vocabulary.

One term, while we were studying about the Eskimos in geography, we used Lucy Fitch Perkins's book, "The Eskimo Twins," for a reading book, and centered our composition work around it. Among other things the children wrote letters to Menie and Monie and then, pretending that they were little Eskimos, answered their own letters. Let me read you one or two to show you what I mean.

NEW YORK, December 7, 1922.

MY DEAR MONIE: I am a little American girl, named Fannie Goldberg. I was born in New York City, but my father and mother were born in Russia. They like America better than Russia.

Our school is a school for the deaf. About three hundred children are in our school. My teacher told us all about you. I read a book about the Eskimo Twins. You like to eat fishes' eyes, but I don't like to eat them. Your father killed a bear. Your family and you drank the blood of the bear and ate the flesh.

Your little friend,

FANNIE GOLDBERG, 3B.

THE NORTH FRIGID ZONE,
In the Dark Season.

MY DEAR LUCY: I thank you for the letter which you wrote me. I am sorry that you are deaf. I do not go to school because there are no schools for me. I live in an igloo. I am 10 years old. I do not know when my birthday is. My father made a sled for Menie and me. We have a good time sliding down the hills.

Menie and I have two dogs named Nip and Tup. They run after us when we slide down the hills. One day the dogs growled. We saw a great big bear looking for fish. We were very much frightened and ran home and told our mother and father that there was a bear near by. Then my father took his spear and went out and killed the bear.

Your little friend,

MONIE.

In this year's work the journals should not be entirely given up, but they may well be narrowed down to certain definite experiences, such as, "Something funny I remember," "How I surprised my mother," or "How I was fooled last April Fool's Day."

The sixth year may well be devoted to concentrated work on clauses. There are so many kinds, some of them so difficult, with which the children must be familiar. Noun clauses, adverbial clauses, clauses of consequence, adjective clauses, clauses of manner, of condition, and of purpose, and clauses in connection with comparison must all be taught. When we add to these the use of the past perfect and the future perfect tenses, we see that we have a full year's work ahead of us.

The composition work may be continued along the same lines as in the previous years, with care taken not to drop the imaginative side. The children may imagine that they are little Puritans and write descriptions of their homes and manner of living. Or they may pretend to be George Washington writing to a friend about the terrible winter at Valley Forge. Here is a letter written by a child who pretended that she was Columbus and wrote to her friend, Americus Vespucius.

MADRID, SPAIN,
April 6, 1493.

MY DEAR AMERICUS: In many years I have wanted to sail west to find India because I believed the earth was round. I asked the King of Italy to help me, but he told me that I was crazy. I went to the King of Portugal and asked him to help me, but he would not. I went to the King of Spain but at first he would not help me. At last the Queen persuaded him to do so.

My ships were small. They looked old. They were named the *Nina*, the *Pinta*, and the *Santa Maria*. Some of my crew were cowards, but some of them were brave. I knew some of them were plotting against me to throw me overboard because they thought that they would fall off the edge of the ocean, but I would not let them turn back to Spain.

My voyage was a good voyage. I am sure I have found India. I took possession of it in the name of the King and Queen of Spain. We found a land with strange people living in it. We couldn't talk with them because they did not talk our language. I planted the flag of Spain. I told the people that this land belonged to the King and Queen of Spain.

The strange people had red skins. They had feathers on their heads and deerskins on their bodies. They lived in wigwams. The women wore beads around their necks.

I want to go over to the new world again. You will be interested in the maps which I drew. Would you not like to come with me to the new world?

Your friend,

CHRISTOPHER COLUMBUS.

A composition beginning, "If I were a sailor, or a very rich man, or if I lived in the Torrid Zone," gives free scope to the imagination and also a wonderful opportunity for the use of the auxiliaries "should" and "would."

In this year, if not before, a certain amount of time should be given to current events, which certainly come under the head of language. The headlines in the newspaper often need much explaining, and the vocabulary which the child encounters in his quest for news is largely unfamiliar. A blackboard or screen covered with burlap, where pictures and short paragraphs about interesting happenings may be posted, helps wonderfully in keeping up the interest. I have found that keen rivalry develops among the children in their efforts to see who can bring in the most interesting news items or the best pictures.

But the days are too few and the hours too short to pack in all the interesting things that one wishes to teach. The most that one can hope for is to be able to say that day by day in every way the language of one's children is getting better and better.

Miss CONNERY. Miss De Motte, of the Illinois school, will now discuss Miss Croker's paper.

Miss AMELIA DE MOTTE (reading):

I agree with Miss Croker that the intermediate grades are much more interesting ones to teach than the primary. But I go a step further and say the advanced are still more interesting. The correlation between language and geography and history affords almost endless possibilities in the matter of topics for composition work. We may have letters written from imaginary places—sometimes an historical spot when an account of the historical event may be incorporated into the letter—letters written from Alaska or Panama will show their knowledge of the climate, sports, and customs peculiar to the place.

Miss Croker speaks of the value of current event items as a language lesson. I use the school paper current events with all my classes one day a week. I try to show them what is important to read in a newspaper and what is of no profit and would better be overlooked. From this paper we get topics for debates, which we write carefully on each side, and for editorials which are frequently on international subjects.

However, through an unavoidable chain of circumstances, I did not know until this morning that the subject of this paper had been changed. The notes I had prepared for the discussion are on primary language teaching. They are a few outstanding suggestions I gained in my recent visit to several schools, and as it will not take much time I believe I will read them, even though we are supposed to be discussing another topic.

The aim to be sought in all of our language teaching is appreciation on the child's part of the value of English to him personally—its value in understanding the English used by others about him, and its value to him as a medium for expressing his own wants, thoughts, and emotions.

It seemed to me in the schoolrooms I visited recently that the children all wanted to find out something or wanted to tell what they already knew in a more real and enthusiastic way than formerly.

I feel that we have made great progress in the last few years in making English a vital thing in our children's lives. They are more interested and more spontaneous than they used to be. Language has ceased to be merely an exercise to be accomplished in a humdrum way, and instead has become a living thing.

I believe this change has been brought about by the endless number of devices, games, and reading charts that are being introduced constantly and adopted by clever teachers to the special needs of our work.

In a first-grade class in the Ohio school I found two interesting games, the "Guess my name game" and "Picture reading for little ones," published by Parker Bros., Salem, Mass. Also reading cards, which form a fine introduction to reading charts. Each card contains a picture with a few sentences about it; for instance, one with the picture of a boy: I am a boy. I have white shoes. I can run.

Chart stories seem to have accomplished more than any other one thing toward making English a medium. Each story is used only once with a class. No drill is given on it, and no written work done. I notice as I observe the teachers using chart stories, that the first question asked involves the point of the story as a whole. It is not the question which would be answered by the first sentence.

One point that we teachers of older classes appreciate is the tendency to give the children more natural ways of expressing themselves—we have always been guilty of giving deaf children stilted expressions. What hearing child would tolerate the expression "May I drink some water" and yet that is what we have taught for years. He would say, "May I get a drink?" Why should we not give this more natural phrase to our children, even though the verb to drink becomes the noun a drink? It will make him more easily understood, will start him on the road toward being more like other people and avoid that stigma of being peculiar. The Lexington Avenue School goes further in this direction than any other school I have heard of. Instead of saying "A woman came while I was still in the room," they are teaching the children to say "A woman has come to see us." "I have received a letter from my mother," when it has recently been received.

In their action work they combine two short sentences in one long more natural one. Instead of saying "Mary went into the yard; she played ball," they say (after all have been to the window watching her), "We saw Mary playing ball." "We saw Frances jumping the rope." This was in a class that had been in school two years, though it was my understanding the first year was in the nature of a preparatory year.

The need for careful drill and frequent repetition is not passed by any means. Pupils make the same mistakes their deaf grandmothers made—the verbs to be and to have are as confusing as they ever were. Books alone will not give the deaf child a good use of English. There must be the careful and systematically presented fundamental work with constant repetition in one form or another. The games and various devices present the subject in a new light, give zest and enthusiasm and bring about the desired repetition and drill without its becoming dull drudgery.

Miss CONNERY. Next is a paper by Miss Gray, of the Clarke School, "An experiment with backward children."

AN EXPERIMENT WITH BACKWARD CHILDREN.

Miss MABEL H. GRAY, Clarke School, Northampton, Mass.

My only excuse for presenting this paper is that for 10 years I have been trying to do the best I can for the backward deaf children in my care, and that I hope I may be able to help a little some one who is grappling with the same problems.

My class is a special class in the primary department. The children with whom I work are not of a low grade of feeble-mindedness. Some are simply very slow; occasionally there is one who, because of illness or long absence, has been prevented from doing the work of his class, and must have a chance to catch up; some are nervous, high-strung children, whose temperament is, to a greater or less extent, responsible for their lack of progress; and a few are obviously below normal mentally. My class is an ungraded—or rather, much-graded one. Children who fit in nowhere else are dropped into it, and I try, so far as possible, to give each one what he needs.

When they leave the class, a few children who have developed tendencies that make them a real menace to the others are dropped; an occasional child is able to take up the work with a regular grade; most of them go on in classes of dull children in the intermediate department for several years.

Backward deaf children share with their brighter comrades in misfortune a need which enters but little into the problem of training hearing children of the same mentality—the need of acquiring some means of communication with other people. For that reason, it is necessary, in their earlier years, to put more stress on language work with them than is done in most special classes for hearing children. I try to give each child as much language and as good speech and lip-reading as I can, even although his use of language must be limited by his mental incapacity; for I believe it will be a distinct asset to his usefulness and pleasure, and to the convenience of the people with whom he will live.

My plan of work is to assign to each child his written work before I begin the recitations of the day. I insist that he finish it before he does anything else, for I believe that thereby he is learning a valuable lesson. Once his written work is done, I try to give him as much freedom in his choice of occupations as is possible in view of the fact that I must be conducting recitations in the same room. Of course, freedom that is used in ill-natured interference with his neighbors or in aimless idling has to be curtailed. He may draw, do handwork, look at books, play quiet games, placed where he can easily get at them, or follow any other of numerous occupations that will keep him wholesomely occupied until I can give him further attention. Sometimes I suggest some special occupation for the day; sometimes one of the children introduces a line of work that proves popular and engrossing.

Perhaps this is a good place to speak of handwork. Like every other teacher who has used it, I suppose, I find some slow children who do it easily and well and delight in it, and from their success receive a valuable accession to their self-respect and fresh courage to attack their language work. It serves a valuable purpose also in supplying occupation for pupils who are in their seats while other grades are reciting, so making good schoolroom citizens out of children who would otherwise be mischief makers. The ideal plan would be to have half the children outside the schoolroom doing industrial work under the supervision of an expert teacher while the others are in the schoolroom doing language work. That is a plan whose realization I can, as yet, only hope for. I have to content myself, for the most part, with simple forms of work that the children can do without much supervision while I am hearing classes. I often have older children who can help the younger ones, and think it is good for both to have them do so. In the afternoon session we often do handwork that requires more supervision on the part of the teacher. The children make simple things that they can get pleasure from, or that some one else can use, such as marble bags or table mats, so that they may have a sense of accomplishment in their work. We use knitting spools and A B C weaving looms; some classes do considerable simple knitting, crocheting, and sewing; we make scrap books for the little children (on bogus paper), weave raffia pillow covers on square frames made by our school carpenter, do various odd bits of work for the schoolrooms, wash plants, polish metal, and so on.

Drawing is a great resource. Many children find it a most absorbing occupation and produce some interesting and creditable work with little or no supervision. Sometimes they copy pictures from books or cards. Frequently one child will set the whole class to drawing something. Sometimes the drawing lesson on Sunday will inspire them with variations for several days. I often

provide tracing paper; for from my own experience with it, I believe tracing to be valuable in giving them a feeling for form.

During the years that I have been doing this work, a few convictions have become very clear to me.

First. With slow children, especially during the first year or two, it is imperative to be very careful not to present new material until the old is well fixed, which means slow progress and much drill. Usually, however, it is such a delight to them to do something that they can do easily and well that they do not object to repetition. Frequently they hail with real glee the opportunity to do some written work so familiar that they know they can do it perfectly with little mental effort. In the early stages of a new subject, I often find it helpful to have a child rewrite the same set of sentences until it is practically memorized. With a quicker child it might lead to a lazy dependence on memory alone; but with a child whose mind is feeble and easily confused, it seems to serve as a foundation, on which, at first by very slight and gradual additions, he in time builds a stable if not very lofty structure.

Second. It will not do to drop any subject for very long at a time. Review must go on unceasingly all the year.

Third. In an oral exercise I make it a rule always to have every child in the division repeat every sentence—if it is an exercise such as action work—or answer every question that is asked. It has been my experience that it is the only way to be sure that children with slow or flighty minds are getting any definite help from the work.

Fourth. Often, when a child seems unusually slow and dense, to have him run around the room a few times or do a few vigorous gymnastic exercises will work real magic.

Fifth. While I mean, so far as possible, to give each child only what he can do, I do insist on his using such ability as he has. Often a marked inclination to lean on some one else, sometimes from lack of confidence in himself, sometimes from a dislike of mental effort, is one of the ways in which a child shows his lack of mental vigor. He is not to blame for it; but I believe he can be helped to overcome it to a greater or less extent, and that it is worth much to him, both mentally and morally, to do so.

Sixth. Simple rewards to work for are a great help in reinforcing the child's will power and getting him over places that require extra effort, especially in the case of a young or immature child. Always, however, I try to help the children realize that by doing their work well they are earning the reward of new knowledge and new power; and many of the older children respond surprisingly.

Seventh. While there are some decided disadvantages in an ungraded class, there is one very real advantage, at least for slow children. We are all familiar with the type of child to whom it seems almost impossible to teach a thing directly, who will yet, by some mysterious process, in time absorb it from watching other children. In an ungraded class, the lower divisions see the others doing more advanced work, and instead of becoming confused, as they would do if they were under the strain of being required to attempt it themselves, they seem by the time they are ready for it to acquire a feeling for it that makes it much easier for them. I have often found that children really knew simple question forms as the result of this absorbing process.

Eighth. After struggling for two or three years to ground a child in the simple fundamentals of language, I often have the rather thrilling experience of somewhat suddenly realizing that he has come into a comprehension of what language is for; that I can give him new ideas and new work without such Herculean effort on his part and mine; that he is reaching out for ideas, and I can share with him some of the interesting and beautiful things about the world and the people in it. I shall not soon forget the response of a 13-year-old child, rebelling against her deafness, to the fact that many other people were bearing pain and trouble bravely, and the appeal to be as brave as they. One such incident is a satisfying reward for much.

I believe that it is well worth while to give a child the ability to get pleasure and simple, common information from books and papers, and a little general idea of any subjects that may interest him, even although he may never be able to pass a creditable examination on those subjects. The interest of children such as mine in many subjects that they have not the ability to take up in the usual way is often very evident from their eager questions and their pleasure in what you can tell them. I have often, too, had children show by their conduct that they had caught the fundamentals of a moral truth, even although they could not state it in clear and correct language. I have not the time to take up any

regular work with them in anything but the ordinary primary subjects; but it is a delight to answer their questions and help them, so far as possible, to understand the things they are puzzling over. I am sure it is time well spent to open for them any windows into the best of life that we can; for they are little human souls.

Miss CONNERY. Is Miss Welsh, of the Rhode Island school, here? [No response.] She is not here, so this concludes our morning program.

Mr. BJORLEE. Before we adjourn for the morning session, I have been asked to make a few brief announcements.

The demonstration of kindergarten work will be held in the kindergarten room beginning at 1.30 and will last for a period of 45 minutes.

At 2.15 the convention will assemble in this room for a question box on kindergarten work.

At 3.45 the general session begins in the assembly room here with a paper on arithmetic by Mr. Barton Sensenig.

I have also been asked to repeat the announcement made this morning to the effect that everyone who is a guest of this institution is expected to register. The registration fee is \$1, and we hope at least that all teachers of the deaf who are present will become active members of the association at the initial fee of \$3 and annual dues thereafter of \$1 a year.

(Whereupon, at 11.45 o'clock a. m., the convention recessed until 2.15 o'clock p. m., this day.)

TUESDAY AFTERNOON—GENERAL SESSION.

The convention reassembled at 2.15 o'clock p. m., pursuant to recess, Dr. Percival Hall presiding.

Doctor HALL. The meeting will please come to order. Mrs. Hurd, chairman of the kindergarten section, will continue the program that was in progress this morning. We will go ahead with the question box in this room.

Mrs. ANNA C. HURD. In seeking to provide something helpful to teachers of young children in our schools, the committee for the kindergarten section, of which I am chairman, decided to conduct a "question box" instead of having several formal papers.

Letters were sent to every superintendent and principal in the United States and Canada, asking that their kindergarten and sub-primary teachers submit questions to be answered. About 75 questions have been submitted. These I have classified into nine groups, eliminating any one that seemed to duplicate another. Under the head of "General questions" I find a number that I believe can be answered best by giving a general statement, descriptive of the life and work of the children of kindergarten age in two or three of our schools.

There seems to be a difference of opinion as to what the age of admission should be, whether anything is gained by admitting children under 5 years, etc. In my opinion a uniform age can not be established for all schools nor for all children. I can only answer for my own school and the type of children with which I have to deal.

We have a large foreign population in Rhode Island—Italian, French, Portuguese. I believe it is of great benefit to bring these children of foreign parentage into our school at as early an age as possible in order that we may begin to Americanize them. Our

State law permits them to be admitted at 3 years of age. Personally I prefer to have them come at 4. During the past year we have had about 20 children between the ages of 4 and 7.

Our arrangements for caring for these children both in school and outside are not ideal, but I will describe them as they are, and in so doing answer a number of the questions asked.

These little boys and girls are quartered in two dormitories, one for the boys and one for the girls. Each dormitory has a lavatory, bath, and toilet adjoining, where the bowls are set low to accommodate the small stature of the children. The dormitories are made as attractive as possible—walls, yellow (the sunshine color); rugs, blue; beds, small; pictures and playthings at hand to interest when the supervisor is engaged with one child, for with such young children it goes without saying that a great deal of personal care must be given.

The children get up at 6.30 a. m., and retire at 6.30 p. m. When not in school the group of boys is in charge of one supervisor and the group of girls in charge of another. These groups are kept away from the older children—in play—but they go to the same dining room and sit at table, each group in charge of its supervisor. Their diet, especially for supper and breakfast, is modified to suit their age—a very light supper being given and a lunch of bread and milk is provided between breakfast at 7 and dinner at 1.30. These children spend about four hours each in school and form two classes.

Upon entering, a child is placed in what I call the Montessori class. He may remain here one year or longer, depending upon his ability and the way he develops. We are very apt to have children enter during the year, after Christmas, even after Easter. These go into the Montessori class and are initiated, but probably must remain the next year in this class. Those who have been in from the first of the year are generally ready to go into the preparatory class the second year. In the Montessori class the child is studied and his interest is aroused. He is trained to observe, to concentrate, to imitate, to originate. He is spoken to at all times and given regular exercises in speech reading. He learns to use his hands, to make things accurately, to value material and take care of it—not destroy it. He has work in tone and rhythm, is led to use his vocal apparatus in a natural manner and later is given a few of the elements of speech. In the second class, the preparatory class, he is given all the elements, has a vocabulary of perhaps 30 spoken words, a few phrases and sentences, understands a great deal of simple language through speech reading, may write quite well although the writing is not stressed.

Now at the age of 6 or 7 years he has the advantage of the above over the child who is just entering at 6 or 7. The foundation is there—the “beginnings” of everything and good habits of living and working have been established, and at the age of 11, my experience shows that in a general all around sense he is in advance of the same type of child who enters at 6 or 7 years.

Now to answer a few of the questions asked directly.

1. Would deaf children between the ages of 5 and 8 receive the same mental development at home as school?

I say unhesitatingly, not in 1 case out of 50.

Mrs. Fox, of New York school, replies to this: "Only in case the mother were trained."

Miss Upham, of the Mount Airy school, replies: "Much depends upon the home environment and the mother, but any normal child, even if not under instruction, will develop remarkably at this age."

2. Is it wise to take children at 4 years of age if they are obliged to enter into classes with children that are twice their age?

I say "no."

Mrs. Fox replies "No."

Miss Upham replies "Emphatically no."

3. Is it wise to take children at 4 years of age without providing special supervision of their play and home life?

I say "No."

Mrs. Fox replies "No."

Miss Upham replies, "Why take any child at the age of 4 out of his home?"

Miss Upham, of the Mount Airy school, gives the following general statement answering a number of the questions asked.

Children are admitted in the Mount Airy school at the age of 5 years; 10 pupils to a class; in school 4 $\frac{1}{4}$ hours, with a 5-minute recess. Recreation and play periods given when required. Children rise at 6.15 a. m.; go to bed at 7 p. m.

The spoken vocabulary at end of year depends upon the child. One year is given to kindergarten work, as a rule. Sometimes a very immature child repeats.

Every entering pupil, who is capable of doing school work—the work of our first year language plan—is placed in a first year class. Children who are not sufficiently developed to do this work are placed in the kindergarten. We have had a few bright 5-year-old children, who have been able to do a part of first year work, but the average 5-year-old child is not ready for language work.

The kindergarten children are given as much lip reading as they can take. They have some of the elements, combinations, and can speak a few words. We spend some time on placing the voice, trying to secure a pleasing quality, etc.

Six-year-old children, unless very immature, start in a first-year class. It has been our experience that the child entering at 7 years makes better progress than the immature baby who comes at 5. All things being equal, the child who entered at 5 will be no further along at the age of 11 than the child who entered at 7 will be at the age of 11.

I will now ask Doctor Taylor, who has just come in, to tell us how he handles the primary, subprimary, or kindergarten children in his school.

Dr. HARRIS TAYLOR, of the Lexington Avenue school, New York. Madam Chairman, what is the subject about and what is it? [Laughter.]

Mrs. HURD. I want you to tell us how your youngest children live, what time they get up, what time they go to bed, what they have to eat; what you do and what they do, and what you do for them.

Doctor TAYLOR. Miss Hancock, what time do those children get up?

Miss HANCOCK. At 6.15.

Doctor TAYLOR. They have breakfast at 6.15. They have to get up 40 minutes before that. That is about 5.30 or a little after. Then they have breakfast.

We begin school at 7.30 and continue until approximately 10 o'clock. Then there is a 15-minute interval, "bun time," and then they are in school until 5 minutes past 12. That is for the youngest children. Then they go to bed about 40 minutes or 45 minutes after they have had their supper, which is about 6.30 to 7 o'clock.

Now is there anything besides the schedule of rising and going to bed?

Mrs. HURD. The work in school; what you attempt with them in school; what they accomplish in the course of the year.

Doctor TAYLOR. Will you please accept the statement on that of my able-bodied and very competent assistant in this case? Miss Hancock, please rise and come forward. Rise and shine [laughter]. Don't hide your light under a 2-bushel basket.

Miss Hancock, will you please give very briefly the information desired in regard to what we expect to accomplish and what we do accomplish?

Miss E. FRANCES HANCOCK. Those who entered this last year or two were from 3 to 7 years of age. This year we have about 25 girls varying from 3 to 7. There have been three classes, but unfortunately the children have come in one at a time until the very 1st of May. By June 1 we had formed three classes.

The youngest pupils of these classes are doing very simple demonstration work; the older ones have had about 25 nouns. They are still doing some of what we call "individual" work, Montessori work, where the teacher can supervise each individual, and in that way they learn how to use their hands. They are supposed to use their material intelligently, to learn to do things about the schoolroom, and learn politeness, unselfishness, etc.

Mrs. HURD. We would now like to hear from Doctor Pittinger, of Indiana.

Dr. O. M. PITTINGER, of the Indiana school. Madam Chairman, fellow teachers, just before lunch Mrs. Hurd asked me to say a word about our school.

Our teacher who has charge of the beginning work was to have been here, but for some reason she has not arrived. I am a little in the position of a certain Scotchman who had had a good deal of trouble with his mother-in-law, and his wife, who was very ill, called him in to have a final talk with him. She said, "Sandy, my man, I know I am about to dee. You have been a fine husband to me, and before I dee I want you to make me one promise." Sandy said, "I will make any promise you want." She said, "At my funeral—I know you will give me a fine funeral—I want you to ride in front of the hearse with me mother." Sandy said, "I have made my promise and I am not one as will go back on a promise, but I want to tell you you have spoiled the day for me." [Laughter.]

I had looked forward to this conference with a good deal of pleasant anticipation, but Mrs. Hurd has spoiled the day for me.

This questionnaire does not fit our conditions at all. We do not have a kindergarten in the sense which is anticipated here. Our entering age is 7 years. Occasionally, when parents forget the age of the child, for convenience, we get some who are younger, but the entering age with us is 7 years. We have two years of what we call "kindergarten," and in that two years, judging from what I have seen in some of the other schools, and from your courses of study, we do very much what many of the schools do in the first and part of the second year.

I have some question about our gradation, our classification. I think it should come more nearly conforming to the established custom over the country which seems to be one kindergarden year

or preparatory year. I am inclined to think that there is a good deal of waste of time in some of our lower-grade work, just as I have always thought there was a good deal of waste of time in the public schools. Because a child is 7 years of age chronologically is no sure proof that he is 7 years of age mentally, and I believe that our children differ in mental age as much as two or three or four years when they enter school. There is too much of a tendency with us to keep them together, although they differ greatly in their ability to advance. I have often thought that children are required to spend a year doing what they ought to do in two months or three months. I am very sure that is true in the public schools, and I am just as sure it is true in the schools for the deaf.

For example, if you were to take the children in almost any fourth grade in the country you would find a number of children who could spell, without any study whatever, practically all the words which they will be required to study and spell for four months and a half before they are promoted. Likewise, there are children in almost any grade in school who could read at sight practically all they will be required to read during the term before they are promoted. We do not know how to avoid this waste of time, and we do not in our schools for the deaf know how to advance children who are capable of advancing very much more rapidly than other children. With us I believe that our brighter children at least should be advanced to what we call our first grade at the end of the first year. It might be well to keep the others longer in this preparatory work.

Our children get up early. We have breakfast the year around at 6.30. They go to school at 8 o'clock. They are in school until 11.45. During that time they have an hour—not an hour, probably 40 minutes—when they are either in the gymnasium or they are with a special teacher who gives them work in kindergarten lines, in certain handwork, the arts and crafts. That relieves the teacher for a time and it gives the children a certain line of training which we have found very satisfactory.

While the girls go to the special teacher in arts and crafts, the boys go to the gymnasium, and when the boys go to the arts and crafts the girls go to the gymnasium.

We have dinner at 12.45, and school begins at 1.45. The children are in school in the afternoon from 1.45 to 3 o'clock—I am speaking now of the little children.

We formerly had a forenoon program altogether, but the children had too much time in the afternoon to fight and to do other things which were not very satisfactory. We find it better to break the afternoon with a short school program, and they are out of school then at 3 o'clock, and from 3 until 5.30 they have a good deal of free time for play and general recreation.

Getting up as early as they do, we find it necessary for them to go to bed early—in fact, that is very satisfactory to them. We have no difficulty with the early rising because they go to bed early.

Mrs. HURD. Under the heading of "Voice" I find I have 10 questions that have been sent in to be answered. The first question is:

What is the best method to use to bring a high-pitched voice to normal? I have a pupil who either closes his throat or shouts. How can I get his voice normal?

I will ask Miss Leonard, of Northampton, to give us some suggestions in answer to this question.

MISS BESSIE N. LEONARD. I think it is necessary to give the child confidence and to help him to relax. I remember in one or two cases where we have had great difficulty with the child we have had that child lie on the floor or lie on the table and simply help it to relax its muscles just as completely as possible—lift its hand up and let it drop, and the feet the same way, until it is in a thoroughly relaxed condition—positive repose. And of course it is very important not to disturb the child that has particular difficulty. You want to give him all the confidence you possibly can. I think feeling the vibration from instruments helps that particular child more than feeling the vibration in the face and throat, because you want to get it out of itself just as much as possible; you want to make it forget itself, and feeling the vibration of the strings of the guitar, the vibration on the piano, the vibration of the drum—all those forms of vibration are the most helpful things that we have found.

Mrs. HURD. Miss Hancock, of the Lexington Avenue school, will add something from her experience in answer to this question.

MISS HANCOCK. I think the child must learn muscular sensation, and after he has learned that, try to use it in everyday speech.

Different devices are useful in different cases. Good results are often obtained from suggestive gestures. Have the pupil feel the vibration in the teacher's chest as she speaks in a low pitch. I think a great deal depends on the teacher; that she does not show in any manner, either by contraction of the facial muscles or the throat, that there is any strain on her part or that there is any difficulty in talking.

A few weeks ago I was talking with Miss X, of Philadelphia. She is deaf and was educated partly at Mount Airy and partly at Lexington Avenue. Only a month ago she was saying how necessary it was to make the child feel that talking was not a difficult proposition; that he should enjoy talking, and not feel that it is a duty or something unpleasant that has to be done. Do not say "No, no; that is not right," unless the child really knows what you mean. Always give some constructive exercise or suggestion.

Doctor Martin once demonstrated with a deaf child, showing how the pitch could be lowered by compression of the larynx. Put the thumb and forefinger on the larynx and press it firmly but gently, and the child will drop his voice two or three tones. Doctor Martin says it is not dangerous. I have not tried it myself very much.

Tell the child to babble as long as possible on one breath. Very often the pitch will drop. If it does, try to have that tone prolonged. Do this over and over until the muscular sensation of the lowered pitch is firmly fixed, and make sure that this tone is used in all his speech, as well as in the exercises.

As a last resort have the pupil put his hand on your throat and feel the larynx move up and down as you give a sound first in high, then in low pitch. Make the child understand that the low position is the one you wish him to imitate. Exercises that do not call attention to the throat are preferable.

Mrs. HURD. Miss Shillady, of the Rhode Island school, gives a number of suggestions in work with the piano along this line, but it

is quite a long paragraph, so I will not read it. However, she makes this suggestion, which I think should be borne in mind all the time:

Do not attempt to make an adult's voice out of a child's. A child's voice is naturally pitched high, and if the quality is good is much more pleasant than a very low pitched voice.

Miss Joiner, of the North Carolina school, gives something along the same line:

The normal voice of a hearing child of 8 is not very low. We are too apt to expect the tender little vocal cords of the deaf child to approximate the low tones of the adult. On the contrary, the tones the young child feels in the adult's throat should be an imitation of the higher-pitched child voice, and all work with a young child's voice should be based on child tones; that is, we should attempt to get the pitch of voice and the quality the child would be likely to have if it were able to hear. Bearing this in mind, I would work with the child of 8 much in the same way as I have described in the answer to question No. 1.

Miss Frances Bell, of Louisiana, says:

Let the child feel the vibration of low notes in the chest and of high notes in the head. By placing the finger tips lightly on the throat over the vocal bands the vibration of high and low tones can easily be distinguished. But great care must be exercised in this. There should be no tenseness on the part of either teacher or pupil.

Mrs. HURD. Another question sent in, and one in which I am sure many are interested in, is: "How much voice development at the piano should be given to children 6 years of age?"

Miss Leonard, will you answer that?

Miss LEONARD. I think you can answer that much better than I can, Mrs. Hurd, because you have done so much more along that line than we have.

I think a little work every day is worth more than a longer period two or three times a week. I think a few minutes every day is very beneficial.

Miss CONNERY. One 20-minute period daily.

Mrs. HURD. Miss Hancock?

Miss HANCOCK. In order to get all the class work in, it is impossible to have work on this every day. It is very desirable, I am sure, but two 15-minute periods a week have done a good deal, and this work supplemented by rhythm or rhythmic games at the recreation period helps on the piano work.

Miss Joiner replies:

With a child of 6 I would use the piano in developing its tactile sense—in making it as expert as possible in recognizing the vibrations characteristic of the various tones. But, with a child that age, particularly if it were the first year in school, I would try to have it not imitate piano tones, but human tones, which in turn imitated the child voice.

Miss Wilma Shillady, of the Rhode Island school, replies:

Voice development should be given daily to 6-year-old children. The best plan would be to have individual voice work for one period and class work for another. I use the piano sometimes and at other times allow the child to feel the voice on the bass drum.

Each child should have at least 5 minutes a day of individual attention. Then from 20 to 30 minutes, at a different time of the day, should be devoted to class work correlating the tone and rhythm work.

Another question asked is:

If a young boy has a very deep voice, would you endeavor to make it higher or would you allow it to adjust itself? If you would aim to make it higher, what steps would you take?

I would like to hear from Miss Leonard on that.

MISS LEONARD. I would try to make it higher. Emphasize the higher tones on whatever instruments you may be using, as well as the human voice. Make him think higher. Put things higher, the sounds that strike the ear. Try to give him a feeling of the contrast between the high and the low.

Mrs. HURD. Miss Hancock?

MISS HANCOCK. If the pitch of a very young boy is too low, I should endeavor to raise it. This may be done by reversing the exercise already given for lowering the pitch.

Mrs. HURD. Miss Connery replies:

I would try to change it. This is sometimes caused by lack of control over the laryngeal muscles governing the pitch of voice. To cultivate a sense of relative pitch is comparatively easy. Try to awaken in the pupil a perception of high pitch and low pitch and then use medium pitch.

Miss Joiner replies:

I would try very hard to make such a voice higher. Careful drill on the "head-tone," *ee* and *oo* vowels, combined with easy consonants, particularly the breath sounds, *f*, *wh*, *th*, is the drill method I would suggest. It is the sort of work that takes time, a great deal of time, and the adaptation of work to the individual case.

Mrs. HURD. The next question is:

Has experience shown any permanent unpleasant after effect of strain or shrillness from teaching the children to first give high, loud head tones?

I would like to hear from Miss Leonard in answer to this.

MISS LEONARD. We have never tried it, Mrs. Hurd, so I don't know.

Mrs. HURD. Miss Hancock?

MISS HANCOCK. An unpleasant quality of voice may be the result of teaching the little child to give loud tones, but the high head tones may be acquired without the loud tones and without any after effect of strain or shrillness, but there is danger in striving for loud tones in any pitch.

Mrs. HURD. Miss Connery's answer is:

I never use head resonance without first getting good fundamental tones. Any overdevelopment of one set of muscles is bound to injure the voice of the deaf child.

Miss Joiner replies:

It has been a belief of mine for several years that when we first get voice we should induce the child to strike the tone he would give had he normal hearing. All young children have soft, high-pitched voices. As a general thing, we let the child of 5, 6, or 7 feel and imitate normal adult tones. So I would try to get the normal child tone, which is high but not loud, and which will not sound like the well-adulated, low-pitched adult tone. In my own experience I have had no unpleasant after effects from such experiments. As the child has continued to use his voice and as the vocal cords have coarsened and strengthened, the results have been satisfactory.

Miss Bell, of the Louisiana school, replies:

I don't know. I don't work for such tones in the beginning.

Miss Shillady, of the Rhode Island school, replies:

My experience has been that the children who have been taught to give head tones first have pleasant natural voices. However, I should not have them give loud tones, either high or low, because that may cause strain.

Mrs. HURD. The next question is:

What educational value has rhythm work for the deaf?

I would like to hear from Miss Leonard on that.

MISS LEONARD. I think the children enjoy rhythm work so much that it can but react very favorably on their speech work. It should help them speak more intelligibly; it should give more fluency, and I believe it does if it is wisely done, thereby giving the children confidence and a great deal of pleasure.

MRS. HURD. Miss Hancock, will you reply to this question?

MISS HANCOCK. I don't know just what educational value is referred to, but if it refers to general culture rhythm work I think it is of educational value to deaf children. I am sure, as Miss Leonard says, if it is well taught I believe that the slight knowledge of time and rhythm that they get gives them some idea, some slight knowledge, of what their hearing brothers and sisters are having in their music lessons. But, of course, we probably should not be justified in taking much time if that were all they got from it. I do feel that it has very definite value, though, when correlated with speech work, in teaching continuity, phrasing, and in many cases inflection.

MRS. HURD. Miss Connery replies:

If properly conceived and executed, rhythm work should teach the deaf child:

- (a) The accented syllable of a word.
- (b) The prominent word or words of a sentence.
- (c) The necessity for clear, distinct articulation and enunciation.
- (d) Modulation of voice.

Miss Joiner replies:

- (a) Rhythm work gives the simple rhymes young children love to deaf children at the age when they should have them.
- (b) The children enjoy acting out these simple rhymes and doing what their hearing brothers and sisters do.

Miss Bell, of the Louisiana school, replies:

A more normal facial expression; better bodily movement; more fluency in speech.

Miss Shillady, of the Rhode Island school, replies:

Modern educationalists are agreed that the first step in a child's education should be to teach him to know himself, to accustom him to life, and to awaken in him sensations, feelings, and emotions before giving him the power of describing them.

The result of a thorough rhythmic training is that the pupil obtains from his powers all the advantage possible.

The creation in the organism of a rapid and easy means of communication between thought and its means of expression by movements allows the personality free play, giving it character, strength, and life to an extraordinary degree.

Rhythm work helps deaf children in their other lessons, for it develops the powers of observation, of analyzing, of understanding, and of memory, thus making them more orderly and precise. Such training makes pupils more responsive, more elastic, and of more character than they otherwise would be, and at the same time affords them much pleasure and enjoyment.

MRS. HURD. The ninth question reads:

What devices or methods are used to produce resonance in the voice of the deaf?

Miss Leonard, what do you say on that?

MISS LEONARD. Miss Smith gave us a good illustration in the beginning of that work on the piano this afternoon. I don't know of anything any better than continuing that, using different vowels and syllables, and anything that brings in the quality of the drum, the tum, tum, tum and boom, boom, boom—that sort of combination helps develop it, I think, better than anything else I know of.

Mrs. HURD. Miss Hancock?

Miss HANCOCK A famous singer and teacher of voice always gave facial gymnastics to her pupils, and manipulated the muscles so that every portion of the resonance cavities should be open. Looking pleasant and wide awake is another means to the same end.

Fillibrowne says that chest expansion is not merely for air, but also to increase the size of the chest as a resonance chamber. The principal vibrations of the voice are, however, above the larynx. To get the best results we must have a free, uncramped use of all the vocal organs.

An exercise that has proved helpful is to give a prolonged nasal and combine it with a staccato vowel, as: m-oo, n-ar, ng-ee, etc.

There are numerous exercises in a book entitled "Resonance in Singing and Speaking," by Fillibrowne, also in Mills's "Voice Production," as well as in books on voice by Lilli Lehman, Katherine Evarts, and others.

Mrs. HURD. Miss Connery replies:

Syllables beginning and ending with m or n develop resonance and carrying power in all voices.

Miss JOYNER says:

Strong adherents of rhythm work claim that it produces resonance. Personally I rely on individual articulation drill and auricular training.

Miss Bell and Miss Shillady offer several special exercises which I will not take the time to read.

The tenth and last is a question on voice:

What is the best possible device or method of drill to overcome nasal voices?

Miss LEONARD, what is your reply to that?

Miss LEONARD. Gymnastic exercises are good; of course the raising and lowering of the soft palate, the back of the tongue, and all those things that we are so familiar with; breath consonants combined with vowels and often the vocalized consonants. Sometimes m-m-m-m will help more than the breath sounds with some children. You have in all these things to be guided so much by the individual with whom you are working. One thing appeals to one child and another to another. I have found in a few cases that a nasal consonant combined with a vowel, getting the contrast between the two, will help—m-m-ee. Combining m with other vowels also will help.

Mrs. HURD. Miss Hancock?

Miss HANCOCK. Nasality is caused by so many different things that there is no one exercise or device that is suited to all cases.

It has been said that a nasal tone is always a cramped tone, due to some interference. If the nasality is caused by a sagging palate, mirror practice may help the child to get the correct adjustment.

I think we should emphasize the fact of having the voice come well focused forward and have the tongue lie easily in the mouth and point well forward.

Take a deep breath and breathe out through the mouth, then vocalize this stream of breath and you have a pure vowel tone.

Nasality is often caused by a stiffened tongue. Tongue gymnastics given to get control of the tongue muscles are useful. The child can then be taught to keep his tongue well forward in the mouth, the point lying easily just back of the lower teeth.

Some pupils respond to exercises based on a nasal combined with a front vowel, as: mimimi, ninini, etc.

With other pupils' exercises of nonnasal consonants, combined with front vowels, as bibibi or dididi, give better results.

Still other children may be helped by exercises made up of vowels only.

Mrs. HURD. Miss Connery says:

This may be caused if the nasal passages are closed by the swelling of the mucous membrane. When this is the case, the soft palate is unable by proper contraction to prevent the tone from entering the nose. If, however, the soft palate is simply sluggish, these exercises, if given systematically, will eventually cure nasality.

Palate exercises:

kee	kay	kee	kay	kee
kah	kah	kah	kah	kah
kaw	kaw	kaw	kaw	kaw
koo	koo	koo		

In fact, any syllable commencing with *k* may be used.

Miss Joiner replies to this question:

The vowel *ar* is my strongest ally. When it is nasal, it can be cleared almost immediately by sharply depressing the tongue in front. This raises the tongue in the back and automatically raises the soft palate. Having got a good *ar*, I begin working with prolonged breath sounds, followed by *ar*. In working with nasality, "don'ts" are easier to give than "do's." Here are some "don'ts."

- Don't call the child's attention to his soft palate.
- Don't give palatal exercises.
- Don't let him give the simplest combination with his teeth shut—make him open his mouth wide.
- Don't try complex breathing exercises—merely simple inhalations and exhalations.
- Don't forget that nasality is really lack of nasal-pharyngeal resonance; be sure that there are no adenoids and greatly enlarged tonsils.

In short, get the nose and pharynx in a clear, healthy condition, make the child talk with his mouth open, get his breathing normal and work from a clear, good *ar*.

Miss BELL. Have the child feel the breath of the vowel on the back of his hand. Give *oo* first. The "blowing out" of vowels seems to force the soft palate up. I've had wonderful success in this way.

Miss SHILLADY. The best cure I know for a nasal voice is to teach the child to raise and lower the soft palate. When the child has the idea of raising the uvula in producing tone, the nasal voice is much improved. The pupils may detect the nasal sound by vocalizing with closed nostrils. Yawning exercises are very beneficial.

That completes the questions and answers on voice.

On articulation the first question is:

What device have you for helping children to distinguish between *M*, *N*, *L*, and *R* following a vocal and nonvocal consonant?

What is your answer to that, Miss Leonard?

Miss LEONARD. For practice with the combinations as they occur in words I use play, pray, ply, and so on, trying to emphasize the difference in the sounds.

We have found it a help in working with our charts under the sounds that are placed on the charts, the *m* and *n* and *l* and *R*, the vocal forms, to write underneath very faintly a sound which shall stand for that nonvocal sound, just as you have in the first line of consonants on your consonant chart the sounds that have no voice. If the child makes the sound of *B*, for instance, tell him "No, no," and point to *F*, perhaps.

In the same way if under *M* you have faintly written in *M*, you can show him not to vocalize the one that you want, but this one which

stands for no voice. The same with the *N*, *L*, and *R*, having something definite to show him.

Miss ELEANOR JONES. In presenting diagrams of breath consonants, I add a dotted line to show the breath.

Soon the children learn that all consonants on the first vertical row of the chart rightfully come under the heading -----, while the voiced consonants come under the heading for voice -----.

I ask for lists for the sake of contrast. Tell me the consonants that belong in the dotted line group, etc.

When the children think correctly about this list, it is just as easy a matter to introduce combinations of *pr*, *tr*, *pl*, *sl*, *sw*, etc., as it was to classify the *p*, *t*, and *k*, for the lesson of the dotted line has been learned and pupils soon find the setting for *pr* is the same as for *p*, while the classification of *br* is the same as for *b*.

It is only a matter of remembering which consonants are subject to the change, and the list being so short a one, it is not a difficult list for children to memorize.

In the same way I ask for combinations under the headings for breath and voice.

Miss JOINER of North Carolina. I have found it a good plan to give all initial *m*, *n*, *l*, and *r* combinations as if each combination were an ordinary consonant element, emphasizing movement rather than position. I not only give the combination, but combine it with vowels, before the mirror, not allowing the children to see the written form until the combination has been mastered and then combined with a vowel. In this way the consciousness of *m*, *l*, *n*, *r* is eliminated from the children's minds, and practically all future trouble is avoided.

When the damage has been done, and the child thinks his *m*, *n*, *l*, and *r* and has quite logically, from his standpoint, acquired the habit of voicing them after both vocal and nonvocal consonants, I know of no device except constant drilling and vigilance by which the defect may be corrected.

Miss BELL of Louisiana. Drill him sufficiently and then let him know it's up to him to remember or have your displeasure.

Miss UPHAM, Pennsylvania school, Mount Airy. Any child who is able to distinguish between a vocal and nonvocal consonant can be taught to distinguish the difference between a breath and a voiced consonant combination, as:

Breath.	Voiced.
<i>pr</i> --	<i>br</i> --
<i>tr</i> --	<i>dr</i> --
<i>dr</i> --	<i>gr</i> --
<i>pl</i> --	<i>bl</i> --
<i>sm</i> --	
<i>sn</i> --	Etc.

Mrs. HURD. The second question is:

How do you help a child who puts voice into his nonvocal consonants?

Miss LEONARD. Of course, by working in the usual way. And we have found that if you take a cardboard tube and put a thin piece of paper over it with an elastic around it and speak into that, letting the child feel the vibrations, it is a little different, and perhaps if the child happens to have the work done just that way it attracts his attention and he likes the feeling of the voice. It is very definite to him to speak into that, he feels the vibrations so clearly, so he tries a little bit harder.

I will not take time to mention other ways.

Mrs. HURD. Miss Jones, will you give us some suggestions along that line?

Miss ELEANOR JONES. By constantly referring to the dotted line consonants:

Miss JOINER. Take him back to fundamentals, giving elementary lip-reading drills like this, "p, breath," "b, voice," etc. Then give articulation drill, combining the nonvocal consonants with one vowel, allowing an appreciable slur between the consonant and the vowel, then shortening your slur by degrees until the combination is normal. Write this drill as follows:

p	—	—	—	—	ar
p	—	—	—	—	ar
p	—	—	—	—	ar
p	—	—	—	—	ar
par					

Miss BELL. His finger tips must be trained. Try going back to beginning work in vibration.

Miss MILDRED M. NEAL, Rhode Island School. I would give the child who puts voice in his nonvocal consonants numerous drills upon the breath consonants, using simple devices, such as feathers, strips or bits of paper, etc., to show plainly the expulsion of breath. Also, I would make sure that the child realizes that he is putting voice into the nonvocal consonant. This fault requires constant attention and correction before it becomes a habit.

Miss LOUISE UPHAM. Line of procedure differs with different children, but make the child correct himself.

Mrs. HURD. The third question is:

Please give suggestions for the clear and vibrant L.

Miss LEONARD. I think that one of the best devices that we use, working bubble, bubble, bubble, dud, dud, dud, lay, lay, lay, loo, loo, loo, lee, lee, lee; working in that way—keeping at it.

Miss ELEANOR JONES. Particularly by babbling la(r), la(r), la(r); loo; loo; loo; lawlawlaw, etc., spending more time, perhaps, on babbling with the *l* final; arlarlarlar, ooloolool, awlawlawl.

Miss JOINER. (a) Tongue control, so that the child can keep his tongue down in the back; (b) a great deal of babbling, using la-la-la-la-la; (c) be sure you have a clear, resonant, sustained *m* and *n*; (d) in teaching *l* in the beginning, emphasize movement rather than position.

Miss BELL. Move tongue from side to side, giving voice. Finally let it rest. Let the child feel the breath as well as the voice.

Miss NEAL. I have always taught *l* in combination with *ar* and *aw*, giving frequent drills upon larlarlar and lawlawlaw, having the child prolong the *l*. Sometimes an *l* is poor because the child does not give sufficient breath with it.

Miss UPHAM. (a) Teach *l* as a position; (b) teach in babbling exercises and in combinations, as—

lar	lar	lar
loo	loo	loo
arl	arl	arl
orl	orl	orl
etc.		

Mrs. HURD. The fourth question is:

What would you do about a child who still can not get *k* after almost a year's trying, yet he gets a fairly good *ng*?

Miss LEONARD. I just keep on trying.

Miss ELEANOR JONES. If a child gets an *ng*, then his position for *k* is correct, so that if he has *ng* and not *k*, the difficulty lies in the action of the breath on the back or the top of the tongue. Let him work from his *p* and his *t*, showing that the action for *k* is the same in the back as the action for *p* and *t* in the front; work this out by contrast:

p	—	m	—	p	—	m
t	—	n	—	t	—	n
k	—	ng	—	k	—	ng

Or:

p	—	t	—	k	p	—	t	—	k
m	—	n	—	ng	m	—	n	—	ng

Miss JOINER. (a) Try to make him see that *k* is an explosive position and *ng* a held position by letting him feel *ngk* in your own throat. (b) Continue working from *p* and *t*. (c) Work from *ar*. *Ar* is usually given as "voice, back, low, close, or wide," according to the locality from which the teacher comes. It is, nevertheless, a back sound and one of the easiest and most effective ways to clear *ar* when it is nasal is to sharply depress the tongue in front. I know of one case of a child who had been in school for two years and was still unable to get *k* and *g*, who got the tongue action from *ark*; *oo* would seem to be the better sound to work from because it is higher than *ar*, but *ar* affords more room in the oral cavity, and hence better light and action. (d) Keep on trying—it will come.

Miss BELL. I usually drop a sound if a child fails to get it after a few weeks. I let it alone until I'm sure he has forgotten his first efforts. Then I try to approach it from a different angle.

Miss NEAL. Often poor *k*'s are caused by the child opening his mouth too wide in the effort of working on the sound. It is very easy for this to happen, since the formation is quite far back in the mouth. In working for *k* I would show the child definitely what takes place, but never allow him to open his mouth wider than just enough to place the little finger between the teeth. Often this helps because when the mouth is open only this much, the tongue lies much nearer the palate and not so much effort is required to produce the sound.

Sometimes, by beginning near the teeth with the top of the tongue and gradually working back to the *k* position, I have gotten a good sound. In doing this be sure the child uses the top and not the tip of his tongue.

Miss UPHAM. Teacher and pupil must work till he does get it.

Mrs. HURD. Question No. 5:

If a child can not get a good *k*, would you let him speak words with *k* in them when the others in the class have such words to speak?

Miss LEONARD. It would probably be safer not to let him, because he might get into the habit of doing it, and of course you don't want him to.

Miss JOINER. Never. Every time a child gives a sound wrongly it becomes that much more difficult for him to give it correctly.

Miss BELL. I think I'd not let him try.

Miss NEAL. If the child makes a fairly good attempt at *k* I would let speak words with *k* in them, because often the position of vowel sound will help to clear up the defective *k*. However, in cases where the *k* is a guttural sound, I would be very careful about letting a habit be formed that would be very hard to overcome. In such cases I would say never let it be used at all.

Miss UPHAM. If a child can not give *h*, he certainly can not give a word with the *k* sound in it.

Mrs. HURD. Question No. 6:

Do you advocate the use of diagrams in presenting new elements?

Miss LEONARD. I should not leave in that word "presenting" in the use of new elements. I would not present an element, of course, in that way. I would present it first from the spoken form, of course, but use it early in the developing or reviewing of the elements.

Miss ELEANOR JONES. Yes.

Miss JOINER. Emphatically, yes. The teacher should be able to draw diagrams rapidly, putting in her significant lines in such a way that she calls attention to them as she draws. The fewer lines used in her diagram the better; and a live diagram, speaking to the class, as the teacher draws it, is worth dozens of carefully measured, technically correct drawings made outside of the classroom. A diagram is much like a caricature, it fixes one or two dominant characteristics sharply.

Miss BELL. Not much.

Miss NEAL. Personally, I have found very little difference in the speech of beginning classes with which I have and have not used diagrams. For very small children I can not see that diagrams are of any great value. For corrective purposes with children from 8 years upward I think they are invaluable. Used for presenting new elements to older children they are most helpful. Most of

the time during my teaching experience I have used diagrams. Until the last two years most of my classes have been composed of children from 7 to 9 years of age.

Miss UPHAM. I do not for kindergarten children.

Mrs. HURD. Question No. 7:

How best develop *b* from *m*?

Miss ELEANOR JONES. I do not do it. I develop *b* instead from *p* by contrast.

Miss JOINER. Don't develop it from *m*; develop it from *p*. For both *m*'s sake and *b*'s sake, it is better that they shouldn't be closely associated at first, or, indeed, at any time. They are akin only in position, and the best articulation concerns itself largely with mastery of movement.

Miss BELL. I've never done it.

Miss NEAL. If this question refers to getting a *bu bu bu* from the child instead of *mu mu mu mu*, I have obtained the most successful results by having the child eliminate voice for a while, having him give *p p p p p p p p*. Later I try having him put voice into the exercise, saying *bu bu bu*. Often if the exercise *bu bu bu bu* is given slower and the syllables somewhat separated for a while, as *bu bu bu bu*, gradually working up to saying them rapidly and connected, the child will see the difference between *mu mu mu mu* and *bu bu bu bu bu*.

Miss UPHAM. Should never do it.

Mrs. HURD. Question No. 8:

Are there any objections to tongue gymnastics?

Miss LEONARD. There might be too much of it. You want to be very careful and not have it exaggerated too much. I think that is a caution that we need to throw in.

Miss ELEANOR JONES. I believe that many of the tongue gymnastics we used to give lead to constriction. For this reason we are substituting the Sarah Jordan Monro (a) tongue in first position, and (b) tongue in second position, preferring to place the emphasis on these two.

Miss JOINER. On the contrary, there are a few tongue gymnastics whose mastery I have found essential to good speech. They are (a) the ability to keep the tongue flat and still in the mouth; (b) the ability to raise the tip and hold it still against the teeth; (c) the ability to raise and lower both the top and back of the tongue; (d) the ability to widen and narrow the tip.

Others are helpful. I do not approve of palatal exercises or of exaggerated facial and tongue contortions.

Miss BELL. No.

Miss NEAL. I can see no objections to tongue gymnastics provided they are given in the right way and children are not allowed to mouth when doing them. I would not use tongue gymnastics so much with very young children, whose tongues are more or less pliable and easily controlled. In many cases I have found tongue gymnastics to be very necessary, especially with children, whose tongues are stiff and hard to control. Given in the right way and when necessary I would advise the use of tongue gymnastics.

Miss UPHAM. Certainly not if one believes in the technique of speech.

Mrs. HURD. Question No. 9:

Do you object to placing the child's hands on the teacher's throat in order that the child may feel the sound being given?

Miss LEONARD. Personally I like very much better not to place the child's hands very much on the throat, because I think it is so likely to lead to some of the things that we have later to overcome. I think it is a good thing for them to feel the vibrations in the face and to feel the vibrations in instruments that you may be using.

Miss ELEANOR JONES. Yes; I believe we should avoid doing anything that might lead to constriction.

Miss JOINER. No; not at all. The teacher must be careful to have the child really listen with his finger tips when he does this. The very tips of the

fingers, where the touch nerves are most sensitive and most highly developed, should be placed lightly against the teacher's throat. It is the hard, convulsive clasp that means nothing to the child that is likely to degenerate into a bad habit.

MISS BELL. Not if care is exercised. But I prefer not. The great harm comes from tensely drawn muscles in the teacher's throat. I have the child put his hand on the teacher's cheeks for vibration.

MISS NEAL. My strongest objection to placing the child's hand on the teacher's throat is that doing so often becomes an unnecessary habit. I have found myself doing this many times when upon stopping to think I have realized that it was not absolutely necessary. However, sometimes by feeling a certain movement of the throat a child will more easily get a sound, and in such cases I would not object to placing the child's finger tips lightly on the throat.

MISS UPHAM. Yes.

Mrs. HURD. Question No. 10:

What is your opinion of the syllable method?

MISS LEONARD. I haven't taught children by the syllable method. I have seen good results from it but I haven't had experience with it, so I feel I have no right to express an opinion on it.

MISS ELEANOR JONES. To my mind this question is not clear. I do not know which is meant, the babbling method or the syllable method.

These suggest drills for two distinct purposes, both of these methods being necessary for good articulation drill work.

Babbling to me suggests more or less indefinite combinations for repetition, given in preparatory work for feeling one's way toward a sound. For example didididi-ippipip; while syllables suggest definite combinations of two definite sounds already learned; for example, par, too, ip, oot, etc.; par-par-par-par not parparparpar.

MISS JOINER. I am a strong adherent of the element method, but there are certain elements that are best obtained through the syllable. They are consonant r, which I give first as rar, roo, ree, etc., and the voiced consonants bu, du, gu, ub, ud, ug, and ju and uj. The use of indefinite voice with all explosive voiced sounds has long been advocated. I sometimes give l in a syllable first, both initially and finally.

MISS BELL. It's all right.

MISS NEAL. Syllable drills are invaluable for teaching continuity of speech to deaf children.

Mrs. HURD. No. 11: Should syllables be given before elements are taught?

MISS ELEANOR JONES. I believe babbling can be given before elements are definitely taught; but syllables suggest combinations of two definite elements and could not, therefore, be given before elements are taught. (See answer to question 10.)

MISS JOINER. Only in the form known as babbling, or as explained in question 10.

MISS BELL. If you can get results that way, all right. I often do it. But I get that individual element eventually.

MISS NEAL. I have never given syllables before teaching elements. However, a great deal of babbling may be given, such as bububu, larlrlar, etc.

Mrs. HURD. No. 12: Should elements be taught singly and then immediately combined in syllables?

MISS JONES. Personally I prefer to teach all elements singly and then to combine them in syllables, but I grant that sometimes there is a great advantage in working up the short vowels by means of combinations with a final consonant (apapap, imimimin, etc.). That, again, is babbling.

MISS JOINER. Yes; but each element must be mastered before combination is attempted, unless combination is used as an end toward mastery, as has been suggested in several previous questions.

MISS BELL. Most certainly, I combine the new element as soon as possible.

MISS NEAL. Yes; the sooner they are put into combinations the better.

MISS UPHAM. I believe the elements should be taught and then combined with other elements.

Mrs. HURD. No. 13: Would you teach the short vowel sounds singly or follow them with a consonant, as *ip, ath, up*, etc.?

Miss JONES. See my answer to previous question.

Miss JOINER. I have no special order for teaching the short vowels—I teach them as they are needed, usually getting *oo* (short) from *oo* (long), *i* from *ee*, etc., and then combining it with the elements my needed word demands. For practice I like the scale *wor*, the back scale, then the front. This may be used taking just the elements, or taking combinations—as *peet—pit—pate—pet—pat*. From the very beginning duration must be stressed in contrasting long and short vowels.

Miss NEAL. I always present the short vowel showing the position, but drill upon it in combination almost entirely.

Miss UPHAM. Should teach the short vowels as separate elements, but would give them in combinations as soon as they have been developed.

Mrs. HURD. Do you think children who have passed their fifth birthdays, who are normally bright, can master all the elements in a year?

Miss JONES. This, I believe, depends too much upon the individual child to permit definitely of a sweeping statement.

Miss JOINER. Yes; with the possible exception of *ch* and *j* which they may may master but are not likely to hold.

Miss BELL. I don't know. I've never handled children that young.

Miss NEAL. Normally bright children who have passed their fifth birthday should not be forced to master all the elements in a year. I would teach them only the ones that they could get without difficulty. To force elements will surely cause constricted, unpleasant speech. It has been my experience that most of the sounds come easily with normal children if they are not pushed too fast. By working carefully from one sound to the next, using as a basis the best sound of the individual child, the best results are obtained. Very young children are very apt to become discouraged if speech work is made a burden to them.

I would say let children of this age have a few of the easier sounds, using them in combination until they are thoroughly familiar with them. So many times what might have been splendid, easy speech has been sacrificed simply because the teacher felt that so much work must be done in a year's time. Let young children have a firm, solid foundation of combination and their speech will undoubtedly be much more satisfactory. Never push beginning children no matter how bright they may be.

Miss UPHAM. Master all of the elements? Have never seen one who did.

Mrs. HURD. Under the subject of "Aural work for very young children" I have three questions. I should be glad if Dr. Edwin L. La Crosse, of the Wright Aural School, would come forward and answer those three questions.

Doctor LA CROSSE. Generally speaking, I don't know exactly what is meant by the first question, but it has a bearing on something we are going to say on Friday on measuring the amount of hearing and getting down to a common terminology so that we will know what each one is talking about.

Now the question sent to me was this:

In cases where there is a decided amount of residual hearing among young children, should not speech be demanded at all times?

I don't know what you mean by "decided amount of hearing." I have certain definite ideas on it. If you ask me, I would say "40 per cent," but you don't know what I mean by "40 per cent." But I suppose this refers to small children, Mrs. Hurd, up to 7, does it?

Mrs. HURD. Yes.

Doctor LA CROSSE. Now the only thing I can think of is that the questioner had in mind the danger that would come from allowing

children with a decided amount of hearing—whatever that means—to speak at all times before they had had the special training to correct that imperfect speech which they probably had acquired without any special training. That is the only thing I can think of that the questioner had in mind—the other alternative.

So, in answering the question I should say yes, allow the child with this decided amount of hearing, 7 years old, to speak at any and all times all of the language within its vocabulary, and we would leave it to the special exercises to correct that imperfect language which the child has.

The question goes on:

Even though this be imperfect, will not the teaching of the mechanism of speech remedy the faults?

Now, there again we come back to the amount of hearing. A child with a certain amount of hearing we should not teach the mechanism of speech. With an imperfect *ch* or *k* we would not give them the position of the tongue in *ch* or the position of the tongue in *k*, but we would give it to them through the ear, working on the same theory as with the child with perfect hearing.

My little girl of 4 did not say "school," she said "kool," but after a while she said "school." Now there is in a great many of those cases a certain amount of hearing, and we do not have to teach the mechanism of speech, but let them get it through the ear, which is a great corrector of imperfect speech.

The question goes on:

And in the meanwhile we are (a) establishing the speech habit, (b) developing the speech center of the brain more rapidly, (c) and using the valuable linguistic period to its fullest extent.

Certainly we know there is a certain language period in all normal children. It should be utilized, and when that language period is passed we have missed a great opportunity if we do not use it at the time.

The second question is:

What do you think about aural training in the preparatory year? How far should it be carried out?

Just as far as you can. For instance, may I give a special case? A little boy of 5 years comes to us. I find that that little boy with the use of the machine we use for testing has 45 per cent hearing. We are able to carry on a conversation with him at the end of that year. That work is carried on just as far as possible. No two are alike.

The next question is:

What hearing apparatus or device is giving satisfactory results in auricular work?

We have the Acousticon, the Gem ear phone, and all of them. We have taken the general position until very recently that the human voice unaided, close to the ear, is better than any hearing apparatus we have yet been able to find. But in order to give the results it wears out the teacher. The teacher can't stand it very long, and only recently we have had constructed an experimental apparatus which seems not to distort the voice and to make up in intensity so that the teacher can speak in almost a normal tone of

voice and get that effect of intensity that is desired. But I would say generally of the instruments which you are familiar with that the Acousticon seems to give the best results for office work. They have a very large machine that has five stops on it, I think, and that seems to give the best results.

Mrs. HURD. We would like to hear just a few words from Mrs. Moore, of Florida.

Mrs. S. M. MOORE, of the Florida school (reading):

AURAL.

1. In cases where there is a decided amount of residual hearing among young children, should not speech be demanded at all times? Even though this be imperfect, will not the teaching of the mechanism of speech remedy the faults, and in the meanwhile we are (a) establishing the speech habit, (b) developing the speech center of the brain more rapidly, (c) and using the valuable linguistic period to its fullest extent.

2. What do you think about aural training in the preparatory year? How far should it be carried out?

3. What hearing apparatus or device is giving satisfactory results in auricular work?

1. Each division of this question may be answered with a practically unqualified "yes." Owing to the unfortunate tendency of the semideaf child to adopt the speech of his deaf schoolmates, it is most necessary that his normal speech be retained and corrected as rapidly as possible. Speech correction should be made through the hearing so far as is practicable.

2. We have followed in the Florida school what Miss Pattie Thomason used to call "a process of fumbling and finding." To every little child coming in we give systematic aural training; to the very deaf instrumental stimulation and vowel drills, embodied in words or alone, as the case seems to warrant; to the semideaf, words and language involving pitch, inflection, etc. We carry this work just as far as the condition of the individual child indicates that we may, steadily coordinating the special aural drills with his schoolroom work. We persist for more than one year, even with the seemingly hopeless cases, and have had some very interesting results in the way of development of hearing power, mental stimulation, and speech correction.

3. We use no apparatus with our very little children. As they advance, the the instrument most generally liked has been a simple pasteboard tube. The Aylesworth tube ranks next. The vactuphone and Miss Bruhn's operaphone have proved very helpful in certain cases. Our observation of their service in other schools has convinced us that they deserve more than merely experimental use.

Mrs. HURD. There are quite a number of questions here that we will not have time for this afternoon—on the question of whether children of kindergarten age should be taught writing or not, on the question of numbers, the teaching of numbers, and some questions about the subnormal child. We do not have time for them this afternoon, but if any of the teachers are interested in having the answers that have been sent in to me, and further answers on articulation work or voice work—those answers that I did not read—I shall be very glad to meet them at some time when it is convenient and let them have the benefit of those answers.

NUMBERS.

1. If a class of children (8 to 10 years of age) show a special aptitude for number work, would it be advisable to hold them back in this for language?

2. Of what would your number work consist with a class whose average is about six?

3. What methods are best used in teaching a child numbers who can easily be taught to read and spell, and the same of teaching reading and spelling that can easily be taught numbers?

4. What is a good method for teaching beginners of the primary age and older pupils in the primary grades?

Answers by Supt. F. W. Booth, of Nebraska:

1. No; do not hold them back in number work or anything else. Taught numbers and the science of numbers—not merely figures and manipulations of figures—they are being taught reasoning and the uses of reasoning, and that can not possibly harm them, for they will use reasoning, their developed reasoning powers, in all other learning, especially in the learning of language. But do not teach figures and figure operations with figures with mental development in view, for they are but the shadow of the substance. Teach numbers and operations with real numbers and you will have taught the substance itself that will cast its own shadow for the most part, giving mental development, with the rest, that will help enormously in the intelligent interpretation and quick mastery of all figure operations.

2. Of number recognition and number expression from the number 1 to the numbers 5, 6, up to 10, according to individual capacities at that age. Do not teach "counting" one, two, three, four, five; that is, the mere sequence of those words, used for the purpose of determining a given number. But teach instant recognition and naming, for instance "four," when that particular relationship of things is presented, not "one, two, three, four."

3. I should use exactly the same method of teaching number to both classes of pupils; that is, to those for whom language learning is easy and to those for whom such work is hard. Both classes need the mental development that attends or results from the use of a proper number-teaching method. I should in teaching reading and spelling—in a word, teaching language—to those for whom number reading is easy employ the method of using language and depending upon language for all purposes for thought communication. I know in fact of no better way of teaching language to anybody, whether number learning be easy or whether it be hard. In truth I do not see that the ease or difficulty of learning numbers has bearing upon the solution of our language-teaching problem.

4. My answer to this question is the method must be objective, both in the kindergarten stage and all the way up or through the primary grades. Above all, do not teach figures and operations with figures at this stage. Numbers and the science of numbers existed in the minds and the practices of men centuries before figures as we use them were invented; therefore, for primary teaching and learning, let us forget figures, or at least the operations with figures, and employ and teach mental arithmetic, all the arithmetic the race had or used in its childhood and all the arithmetic any individual, deaf or hearing needs and can really understand and use in his childhood. I use the figures 1, 2, 3, etc., in my primary work, but merely for expression purposes, and operations with figures later only as a convenience or for purposes of record. Operating with figures must be an outgrowth of possessed knowledge, largely an invention of the pupil himself. The "show, copy, remember" method, especially in the primary stages, is deadening, so do not show operations with figures and drill upon them at an early stage in your teaching, as they are the final word in the development of the science of numbers in the history of the human race, so let them wait and be in truth the final word likewise in the development of the science of numbers in the life history of the deaf child.

WRITING.

1. Should writing be attempted in a first-year class of very young children? Miss EUGENIA WELSH. In the Rhode Island school, children entering between the ages of 3 and 5 are placed in what is known as the Montessori class. Much individual attention is given by the teacher in making a beginning toward writing.

Exercises leading up to this are for the purpose of getting muscular control and holding the pencil correctly. Beginners' pencils are used. I find they are more satisfactory than crayola. Large objects, cut out of wood about one-half inch thick are traced by the child on paper and filled in with this pencil. The Montessori insets can also be used in this way, but the large objects are better at first, as the surface to be filled in is large and gives a freer use of the pencil. Very simple stencils can also be used or any kind of hand-work that gives a use of the pencil. Touch exercises, using sandpaper letters, tracing them again and again with the finger. Later making an attempt to form them from memory on the blackboard or on paper.

Miss UPHAM. They are taught writing by easy steps. They write only the elements and words they can speak. Should not attempt writing with children under 5.

2. Is any written work given the first year? If so, what is the size of the child's written vocabulary?

Miss EUGENIA WELSH. With very young children a great deal of speech reading and speech should be given before writing. Children entering at 3 or 4 would have no written vocabulary at the end of the first year. They would have quite a large speech reading vocabulary and a beginning in writing would have been made.

Miss UPHAM. Written vocabulary would depend upon the number of words the child could speak. Spoken vocabulary depends upon the age and mental development of the child.

3. At what age do you suggest the teaching of writing in beginning classes?

Miss EUGENIA WELSH. It would depend somewhat on the development and individuality of the child. In writing, as in everything else, some children learn to use their hands or have a better use of their hands than others. There are those who find any kind of work with the hands very difficult. I would not force the latter class to write, especially if they are young. It would be better to give more preparatory and individual work.

Miss UPHAM. We teach writing to all pupils—whether kindergarten or first year. See answer to question No. 1.

4. What are the arguments, if any, against teaching children in subprimary grades to write?

Miss EUGENIA WELSH. In the subprimary grades the children are usually young, and we can not hold very young children responsible for a very large spoken vocabulary. We would not want them to have a written vocabulary far in advance of their speech, but should keep in mind the one great law of oral work. First, speech reading; second, speech; third, writing.

Miss UPHAM. One argument against teaching writing is that the child is likely to think in written language rather than in spoken language.

Answers by Miss MYRTLE GIFFORD:

1. What number of subnormal children should be in a class to do justice to each child?

Answer. Eight subnormal children make a good class and more than 10 can not be readily managed.

2. How many hours each day do you consider it advisable for a subnormal pupil to be in school?

Answer. The regular school session is not too long for subnormal children but they should not be required to do mental work all the time. Alternate with busy or industrial work. The discipline is good for them and it gives the teacher an opportunity to observe their natural ability and development. Very often a new idea is brought out by their interest in the work of their classmates.

3. What do you consider a satisfactory program for a class of 12 in number, chronological age 8 to 12, mental age moron to mental deaf?

Answer. It would be almost impossible to make a general program to suit the needs of a subnormal class, but I will outline the plan which I worked out for myself and followed.

The morning exercises and physical exercises are done together. The balance of the session is divided by the number of pupils and again by the number of periods each child should have. The work is largely individual. If two or three children can work together the classes are combined, which allows longer periods, is more interesting, and is very satisfactory. When the class is dismissed each child should have something to do connected with the class work and something else in the line of busy work to occupy the time until another class period.

Time 8 to 12.45, with 15 minutes recess; 4½ hours.

Average class of 12:

First group of three, small, dull, misunderstood deaf children.

Second group of three, children who have been demoted; probably know a few elements.

Third group of three, dull children with some hearing, who have been kept at home.

Fourth group of three, very slow or incorrigible.

Program (first week):

8 to 8.05 a. m., prayer or attitude for prayer.

8.05 to 8.10 a. m., call attention to calendar.

8.10 to 8.28 a. m., physical exercises, marching, gymnastics, etc.

Seat work (15 minutes for each class):

8.28 to 9.28 a. m.—

First class, elements; copy; parquetry blocks.

Second class, elements and combinations, copy; parquetry blocks.

Third class, review elements; develop nouns; sewing cards.

Fourth class, reading by any method; bead stringing.

9.28 to 10.28 a. m.—

First class, lip reading (simple nouns as a ball, a cow), tracing sliced animals.

Second class, lip reading, commands, tracing sliced animals.

Third class, develop residual hearing; writing; cutting pictures.

Fourth class, any drill work, writing, clay modeling.

10.28 to 10.30 a. m.—

Prepare for recess.

10.30 to 10.45 a. m.—

Recess.

10.45 to 11.45 a. m.—

First class, dictation of commands; line drawing; matching pictures.

Second class, dictation simple nouns; drawing; busy work.

Third class, simple sentences; writing; sewing cards.

Fourth class, attempt sentences; writing; knitting; coloring, etc.

11.45 a. m. to 12.40 p. m. (15 minutes for first three classes; 10 minutes for last class)—

First class, recognition of number; color work; game.

Second class, combination of number; color work outline; game.

Third class, addition; seat number work; game.

Fourth class, attempt to teach number; clay; blocks or cutting.

12.40 to 12.45 p. m.—

Order for dismissal.

4. What would you suggest as a graded course of handwork for subnormal pupils?

Answer. I should begin with the simple divisions made by Froebel for kindergarten work, motion, color, form, number, and touch. At first their hands need strengthening and gymnastics of the arms, hands, and fingers aid greatly to do this. Begin with parquetry blocks, stick laying, sliced pictures, coloring pictures, writing, building blocks, paper folding, and any kindergarten gift or occupation which seems to be needed by the pupil. Then carefully lead on to clay modeling and drawing from pictures, making original designs and finally to sewing, knitting, rug-making, basketry, making of mats and any useful industrial work. Never give them a task which seems endless to them. They like to see the finished article. For instance a rug is much more satisfactory than yards and yards of carpet.

HANDWORK.

1. What proportion of time should be devoted to handwork with half-day pupils?

Mrs. Fox. Would suggest half hour three times a week.

2. Please suggest some exercise or busy work to give to the other members of the class while engaged in individual voice work.

Mrs. Fox. Sorting pegs according to colors; forming outlines with pegs; matching words to pictures; puzzles.

3. How much of a five-hour session should be given to "busy work" with a class averaging 6 years?

Mrs. Fox. Would suggest a free period for last half hour of day in which the child may choose his own occupation, reading, drawing, etc.

GENERAL SESSION.

Doctor HALL. The meeting will come to order, please. We will continue the program of the general session. We have on the program as part of the general session another paper this afternoon—perhaps two papers—I am not sure whether Doctor Crouter, who is down for the second paper, will arrive in time this afternoon, but we have another paper by Mr. Sensenig, who is right here waiting for us now.

I wish to call your attention to the fact that this evening there is to be a social gathering with music, dancing and cards for those who care to stay here and enjoy it, beginning at 8 o'clock.

I will also call your attention to the program for to-morrow, which has been completed and will be distributed at dinner time. Please do not forget that there will be demonstrations of class work, grade 1 class work repeated by request in room 1; primary arithmetic in room 4; language of the fourth grade in room 5, to-morrow morning from 8.30 to 9.30.

Also a lecture on psychology for the teachers of the deaf, by Mr. Putnam, right here in this room.

We hope those gatherings will be well attended to-morrow morning.

It is now my pleasure to introduce Mr. Sensenig, who will give you a paper on the teaching of arithmetic, practical arithmetic—Mr. Barton Sensenig of the Pennsylvania institution.

Mr. SENSENIG. Ladies and gentlemen, before starting on this paper I want to correct perhaps a wrong impression that has been given about Ellis Lit. He is a graduate of the Mount Airy school. There seemed to be some doubt this afternoon as to what school he belonged. He is one of the best speech readers in the United States. I meet him frequently. Most people do not know that he is deaf.

I am very glad to have Mr. Booth interpret my paper this afternoon. He is an old coworker and instructor of mine. I got my early training as a teacher under him, and I am very proud to have him interpret this paper. He is one of the pioneer teachers of arithmetic, and I bow to Mr. Booth who gave me the benefit of his experience as a teacher of arithmetic years ago.

PRACTICAL ARITHMETIC.

By BARTON SENSENIG, Pennsylvania Institution.

The modern educational slogan is to cast on the scrap heap knowledge that does not function in the life of the average individual. Those who desire knowledge along special lines must take special courses adapted to serve their purpose.

Most people are agreed, however, that the average person should be able to read the newspaper understandingly, should know how to write and cipher. To read the newspaper understandingly requires more education along arithmetical lines than some of our modern faddists are willing to allow in their scheme of instruction. It takes an all-around education to understand all that appears in a newspaper, an education that must include about all that appears in any book containing the essentials of arithmetic. The average man does not need much of an arithmetical equipment provided there are those at hand who can supply him with information when he needs it. If someone had not had considerable mathematical training the writer could not have come to Belleville on a train, and on a broader scale, we could not have won the World War were it not for mathematical preparation. It is a good thing that we have among us men of wide mathematical training who can supply such information as is required for our advanced civilization. However, in this paper we shall discuss only such subjects in arithmetic as touch directly on the lives of the great mass of the people.

Here is a bill containing 12 items rendered by a first-class grocer. The spelling is inaccurate, the writing is fair, but the most essential things, the figures, are plain. It remains for the housewife to see that she received all the articles purchased at the prices quoted and then to add up the bill to see that it is correct. In chain stores no bills are rendered, and the addition is generally made on one of the packages, the buyer adding the figures to see if there is an error. In the United States probably more than 20,000,000 persons daily perform addition and most of these people use English incorrectly, which shows that the latter is not so essential after all. We must admit that rapid and accurate addition is about as practical a thing as we can teach our pupils.

To be able to add rapidly and accurately requires much training. To begin with, it assumes a perfect mastery of the 45 primary combinations in addition. Of these combinations 25 lie within the 10 limit and all lie within the 18 limit. Though pupils will first be required to make combinations within the 10 limit, they should not be restricted in counting. Not only should they be permitted to count to a hundred or more, but they should be encouraged to do so. This knowledge will be of use, and, moreover, it is very easy to count to a hundred as the order of digits in the twenties, thirties, etc., follows the order with which the pupils are already familiar. Since the same combinations are used in both addition and subtraction, the two processes should be taught interchangeably.

The way to make a fact cling to the mind is by making the first impression vivid and then repeating at intervals. We never forget that two fives make ten. To master the 45 combinations we must pass them under review continually. They should be reviewed daily. They should be placed on charts to be used by the teacher before the class. In fact, most primary and intermediate work may be presented in this way. The charts that follow in this paper assume that the children have counted at least to 100.

Only one page is given here by way of illustration. There are two pages for each of nine digits, one for plus (+), the other for minus (-). Here is exhibited the + 7 page:

CHART I.

COMBINATIONS—PRIMARY AND SECONDARY.

7 + 7	27 7	87 7	37 7	67 7	47 7	97 7	107 7	227 7		
8 7	28 7	18 7	38 7	68 7	98 7	88 7	78 7	48 7	58 7	
9 7	29 7	39 7	49 7	19 7	59 7	99 7	69 7	79 7	89 7	
16 7	26 7	86 7	36 7	46 7	96 7	56 7	76 7	66 7	286 7	
15 7	25 7	75 7	35 7	95 7	45 7	65 7	55 7	85 7	235 7	
14 7	34 7	84 7	54 7	94 7	64 7	74 7	24 7	44 7	134 7	
13 7	33 7	83 7	23 7	93 7	43 7	63 7	23 7	53 7		
12 7	42 7	62 7	82 7	22 7	72 7	92 7	52 7	32 7		

MIXED COMBINATIONS (AT SIGHT).

56+7=	68+7=	33+7=
89+7=	98+7=	56+7=
96+7=	67+7=	95+7=
77+7=	49+7=	27+7=
45+7=	45+7=	38+7=
34+7=	34+7=	64+7=
29+7=	69+7=	24+7=

PRIMARY COMBINATIONS.

Naturally, the thought arises as to when these combination charts are to be used. Practically no arithmetic need be attempted in the first year of school life. Only such figures and names of figures should be used as appear in the play of the children. They have the idea of number before we start to teach them. So have birds and dogs. A dog may not be afraid of one other dog, but when he sees five or six trying to reach him he beats a hasty retreat. We should not be in a hurry to start the work in formal arithmetic, but when we do start we should proceed in a logical way to produce results. Just as much progress is made if children are not taught arithmetic until they are eight years of age—and, parenthetically, let me stir up a little mental activity by saying that deaf children have no business in school until they are six years of age. I do not make this statement unadvisedly. I have consulted with those who are experts in primary work, and they inform me that invariably those who enter school later outstrip those who enter at the age of four and five. We know personally of children who enter schools where they are accepted at an early age and later, coming to our school; by the time they have finished our course they have been 17 years in school, graduating with low standing after having been tried out in the public school. The babbling free speech which is allowed to pass muster in the early stages of their school life clings to them and is very hard to understand, though the speech reading is very good. So, we see that though the vocal organism is supposed to be more flexible in the early years, this advantage is more than lost in the fact that the children are too young to profit fully by the instruction given them.

When the class first takes up arithmetic it should not become involved in a multiplicity of objects. To quote from a previous article: "Groube and others who have followed him have simply wasted valuable time in making a too liberal use of objects which comes as a result of working with numbers within a narrow limit. One need not forever dwell upon the number concept. Four pictures, four trees, four rabbits all involve the same number concept and there is no use in multiplying names." The children readily see that 10 is more than 5 and 8 is more than 4. There is not a person in this room who looking upon 10 persons knows that there are 10 without counting or making combinations. The children readily perceive that a number of two digits is greater than one of only a single digit and that one of three digits is greater than one of two, etc. The factors used in reasoning are ideas, not objects. A school that has nothing but sticks for counters will get along better than one which has a wealth of material at hand, so far as arithmetical advancement is concerned.

We believe that a concentration of effort in mastering the combinations will result in accomplishing the end sought in half the time generally taken, and that in a measure will appease those who think too much time is given to arithmetic.

TIME CHARTS IN ADDITION AND SUBTRACTION.

Pupils should be limited in time in doing addition and subtraction problems. It has been shown that those who learn to add rapidly make a smaller number of errors than those who proceed more slowly. With practice the time period should be shortened.

There follows one page of a time chart in addition, the time limit being five minutes:

CHART 2.

ADDITION—FIVE MINUTES.

11	25	46	78	23	48	37
+12	33	21	21	76	51	23
38	46	78	87	67	88	49
22	54	54	96	44	25	26
87	29	39	27	89	48	73
96	87	48	96	46	96	24
24	53	48	87	28	49	87
31	76	26	23	38	76	23
23	96	73	46	48	23	49
23	50	87	67	75	27	27
37	29	23	86	26	6	14
46	31	29	26	43	45	8
24	46	31	35	28	73	7
45	73	38	345	876	50	400
6	15	79	18	245	763	75
17	9	40	124	763	25	6
18	46	65	76	231	8	875
26	18	7	125	816	425	317

On another chart there might appear a problem in addition such as the following, with a double check to test the accuracy of the result:

54	3967	59
48	8275	55
55	9673	48
59	2876	54
	7546	
59409	9237	59409
	8145	
	7689	
	256	
	1745	
	59409	

The method of casting out nines to check is interesting but is not used. The method illustrated above is recommended and employed by the civil service. It admits of interruptions. After adding a column one may turn aside to answer the telephone or transact any other urgent business before resuming the work of adding at the point where he had left off.

No abstract addition and subtraction problems should be assigned for the study-hour period at first, because children left to themselves will take more time than they should and may form the bad habit of counting on their fingers or by some other undesirable device. The work should all be done rapidly under the teacher's direction until all combinations are readily known. We would have a system of time charts containing questions in addition and subtraction and credit those with full value who finish the work correctly in the allotted time. Those who take more time would receive a less value though correct. We would then drill the slower ones on the combinations again while the brighter ones are engaged in some other work.

MULTIPLICATION AND DIVISION.

In teaching multiplication and division the same combinations are made use of. So multiplication and division should be taught interchangeably. The multiplication tables must be mastered, which is no small task. The task is simplified somewhat by showing the pupils that factors may be interchanged. Three times four is the same as four times three. The meaning of multiplication is shown by adding the number to itself as many times as is indicated by the multiplier. Thus, six plus six, plus six, is six times three. In division, we show that the question is to find the other factor when one factor and the product are given. We have developed the subject on some charts, one of which, to illustrate the "4-times" combinations, is given here:

CHART 3.

MULTIPLICATION AND DIVISION—THE "4-TIMES" COMBINATIONS.

1	3	4	2	6	5	8	7	9	10	12	11	0
1	3	4	2	6	5	8	7	9	10	12	11	0
1	3	4	2	6	5	8	7	9	10	12	11	0
1	3	4	2	6	5	8	7	9	10	12	11	0

$1 \times 4 = ?$	$6 \times 4 = ?$	$10 \times 4 = ?$	$4 \times ? = 12$	$4 \times ? = 36$
$3 \times 4 =$	$5 \times 4 =$	$11 \times 4 =$	$4 \times ? = 24$	$4 \times ? = 48$
$2 \times 4 =$	$8 \times 4 =$	$12 \times 4 =$	$4 \times ? = 4$	$4 \times ? = 32$
$4 \times 4 =$	$9 \times 4 =$	$0 \times 4 =$	$4 \times ? = 20$	$4 \times ? = 44$
			$4 \times ? = 28$	$4 \times ? = 16$

$4 \overline{)12}$	$4 \overline{)8}$	$4 \overline{)16}$	$4 \overline{)24}$
$4 \overline{)32}$	$4 \overline{)28}$	$4 \overline{)48}$	$4 \overline{)88}$
$4 \overline{)80}$	$4 \overline{)44}$	$4 \overline{)96}$	$4 \overline{)64}$
$4 \overline{)132}$			

$\begin{array}{r} 13 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 34 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 73 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 634 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 976 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 875 \\ \times 4 \\ \hline \end{array}$
$\begin{array}{r} 4325 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 7876 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 399 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 888 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 6868 \\ \times 4 \\ \hline \end{array}$	

$28 \div 4 =$	$16 \div 4 =$	$48 \div 4 =$	$36 \div 4 =$
$32 \div 4 =$	$24 \div 4 =$	$44 \div 4 =$	$20 \div 4 =$

$4 \overline{)84}$	$4 \overline{)88}$	$4 \overline{)64}$	$4 \overline{)96}$	$\frac{1}{4}$ of 24 =
$4 \overline{)112}$	$4 \overline{)92}$	$4 \overline{)72}$	$4 \overline{)52}$	$\frac{1}{4}$ of 32 =
$4 \overline{)76}$	$4 \overline{)972}$	$4 \overline{)1864}$	$4 \overline{)2732}$	$\frac{1}{4}$ of 16 =
$4 \overline{)7684}$	$4 \overline{)3796}$	$4 \overline{)13264}$	$4 \overline{)87972}$	$\frac{1}{4}$ of 40 =
9 times $4 \overline{)37}$ 36	$4 \overline{)73}$	$4 \overline{)117}$	$4 \overline{)235}$	$\frac{1}{4}$ of 28 =
1 over $4 \overline{)375}$	$4 \overline{)1343}$	$4 \overline{)1763}$	$4 \overline{)7965}$	$\frac{1}{4}$ of 44 =

It is almost impossible for some backward children to learn the multiplication table. These may be taught to divide by another method in which the multiplication table is not used, as follows:

25 (1)	135
25 (2)	25)3375
25 (3)	25
25 (4)	87
25 (5)	75
	125
	125

There is also a method of multiplying in which only the two-times table is used in all multiplication problems involving whole numbers. This method is used by natives of Turkey who have little opportunity for learning in school. The method is interesting, and those who can add and who know how to multiply and divide by two may be successful in its use. The method can best be explained by doing a problem. Suppose it is required to find the product of 24×36 , then

24×36	
12×72	
6×144	
3×288	
1×576	
864 Answer.	

It will be noticed that one factor is halved and the other doubled, which will give the same products as the original numbers. In this halving process all fractions are thrown away; all even multipliers are rejected. The sum of the remaining products is the answer required.

FRACTIONS.

A fraction of a thing is a part of it. Fractions are made plain by concrete examples. The ideas are readily conveyed by drawings. On the basis of drawings, we have made some charts showing the development of the subject. The charts are simply suggestions. As it would take up too much space here to set forth a full development of the subject of fractions, only one sample page is given.

CHART 4.

FRACTIONS.

$\frac{1}{2} = \frac{8}{16}$	$\frac{1}{4} = \frac{4}{16}$	$\frac{1}{8} = \frac{2}{16}$
$8 \times \frac{1}{16} = \frac{8}{16}$	$4 \times \frac{1}{16} = \frac{4}{16}$	$2 \times \frac{1}{16} = \frac{2}{16}$
$4 \times \frac{1}{16} = \frac{4}{16}$	$2 \times \frac{1}{16} = \frac{2}{16}$	$8 \times \frac{1}{16} = \frac{8}{16}$
$2 \times \frac{1}{16} = \frac{2}{16}$	$8 \times \frac{1}{16} = \frac{8}{16}$	$4 \times \frac{1}{16} = \frac{4}{16}$
$2 \times \frac{1}{16} = \frac{2}{16}$	$4 \times \frac{1}{16} = \frac{4}{16}$	$2 \times \frac{1}{16} = \frac{2}{16}$

We see that if we multiply or divide by the same number, we do not change the value of the fraction.

Change these fractions to lower terms:

$\frac{2}{16} = \frac{1}{8}$	$\frac{12}{16} = \frac{3}{4}$	$\frac{14}{16} = \frac{7}{8}$	$\frac{10}{16} = \frac{5}{8}$	$\frac{6}{16} = \frac{3}{8}$	$\frac{6}{8} = \frac{3}{4}$	$\frac{4}{8} = \frac{1}{2}$
$\frac{2}{8} = \frac{1}{4}$	$\frac{6}{12} = \frac{1}{2}$	$\frac{8}{12} = \frac{2}{3}$	$\frac{9}{12} = \frac{3}{4}$	$\frac{10}{12} = \frac{5}{6}$	$\frac{16}{32} = \frac{1}{2}$	$\frac{15}{20} = \frac{3}{4}$
$\frac{16}{24} = \frac{2}{3}$	$\frac{30}{36} = \frac{5}{6}$	$\frac{20}{30} = \frac{2}{3}$	$\frac{12}{15} = \frac{4}{5}$	$\frac{6}{9} = \frac{2}{3}$	$\frac{14}{20} = \frac{7}{10}$	$\frac{8}{24} = \frac{1}{3}$

Change the following fractions to *higher terms*:

$$\frac{1}{2} = \frac{?}{12}$$

$$\frac{1}{3} = \frac{?}{12}$$

$$\frac{3}{4} = \frac{?}{12}$$

$$\frac{3}{4} = \frac{?}{8}$$

$$\frac{3}{5} = \frac{?}{10}$$

$$\frac{2}{5} = \frac{?}{20}$$

$$\frac{3}{8} = \frac{?}{16}$$

$$\frac{2}{3} = \frac{?}{9}$$

$$\frac{7}{8} = \frac{?}{16}$$

$$\frac{5}{8} = \frac{?}{24}$$

$$\left. \begin{array}{l} \frac{2}{3} = \frac{?}{12} \\ \frac{3}{4} = \frac{?}{12} \end{array} \right\} = \frac{?}{12}$$

$$\left. \begin{array}{l} \frac{5}{8} = \frac{?}{8} \\ \frac{3}{4} = \frac{?}{8} \end{array} \right\} = \frac{?}{8}$$

$$\left. \begin{array}{l} \frac{3}{5} = \frac{?}{20} \\ \frac{1}{2} = \frac{?}{20} \\ \frac{3}{4} = \frac{?}{20} \end{array} \right\} = \frac{?}{20}$$

$$\text{Add } \frac{1}{4} \frac{2}{3} \text{ and } \frac{1}{2}$$

$$\text{Add } \frac{2}{3} \frac{3}{8} \text{ and } \frac{3}{4}$$

The problem of multiplying a whole number by a mixed number is the one that occurs most often. In meat stores this is the constant problem and every family buys meat. So we see that each adult in the family should be able to determine readily the amount of his bill.

On a Saturday afternoon we watched the passing show in a beehive meat store. Meat was sold rapidly and computations were made just as rapidly, and customers were cheated from 3 to 15 cents on each sale. The clerks simply played safe by making the bill high enough, and the customers who thought they were paying less per pound paid about current prices after allowance was made for the errors in computation.

Pupils should be taught to approximate results rapidly without use of pencils. Teachers should drill much on this kind of work. Suppose we wish to reckon the value of five and three-fourths pounds of meat at 30 cents a pound. That is the same as six pounds less a quarter of a pound, or the price would be \$1.80 less \$0.07, which equals \$1.73. We must try to present the subject in as practical a way as possible. It is a fact that a practical man with limited education may excel some of our high-school graduates who try to apply some method taught them. This should not be.

DENOMINATE NUMBERS.

In the early treatment of denominate numbers, units most in use should receive first consideration. Inch, foot, yard, dozen, United States money, pint, quart, gallon, ounce, and pound are measures frequently used. Pupils should be instructed to measures and should have a proper concept of each measure. In learning fundamental operations, stress should be laid on performing operations automatically. In the sphere of denominate numbers just the opposite holds true. Here knowledge is acquired through experience. How tall is John? Measure and see. How many feet long is the room? How many inches wide is the desk? How long is a mile? Take a string 66 feet long and apply it 80 times in measuring distance and you have a mile. After actually measuring a mile, we refer to it in judging long distances. We lay out an acre on the lawn and judge the area of the institution grounds in terms of acres.

A short time ago the statement was made in Current Events that the steamship *Majestic* was over 900 feet long. We started at the gate on Germantown Avenue to lay out the distance, proceeding in the direction of Wingohocking Hall, and the measured distance fell but a little short of reaching the building. Both deaf pupils and hearing teachers were amazed to find out that we had a ship of such great dimensions.

A very interesting project is to find out the height of Mount Everest on a circle 80 inches in diameter representing the earth. Here 80 inches stand for 8,000 miles.

Eighty inches equal 8,000 miles.

One inch equals 100 miles.

One-half inch equals 50 miles.

One-fourth inch equals 25 miles.

One-eighth inch equals 12½ miles.

One-sixteenth inch equals 6¼ miles.

Mount Everest, the highest mountain, is not so high after all, for on our circle Mount Everest would be less than one-sixteenth inch high. That doesn't amount

to much on our 80-inch circle. This little pimple on the earth neither Americans nor Englishmen have been able to scale.

Why should the spirit of mortals be proud?

USE OF THE CHARTS.

The chart method has the following advantages:

- (a) It encourages working without pencil.
- (b) It promotes oral work.
- (c) It is handy for drill purposes.
- (d) It encourages rapid work.
- (e) It allows no time for any except automatic methods of learning combinations.
- (f) It saves the teacher the labor of putting similar work on the slates.
- (g) The pupils may be placed in competition with each other, section against section, in mastering the charts, time and accuracy being the dominant factors in determining the winners.

Doctor HALL. We have another paper this afternoon, and our time is short, but I would like to have this very excellent paper of Mr. Sensenig's discussed for a few minutes. Are there any questions you would like to ask Mr. Sensenig in regard to any of this work that he has explained?

Mr. T. C. FORRESTER, Rochester school. You made the remark that you did not care whether the teaching of arithmetic was taken up until the third year. Personally I agreed with most of what Mr. Sensenig said, but I can not agree with him on that point. I never could see why arithmetic should not be taken up in the first year in school.

I should also like to ask Mr. Haycock to give us his opinion on the teaching of arithmetic in the old-country schools. I understand they really teach in the first year as much as we teach in this country in three years.

Mr. SENSENIG. I said I do not care if you don't teach any formal arithmetic for two or three years. You may if you want to, but I will get them out at the end of the time, and they will graduate and cover the course. What I am driving at is this: People are complaining about too much time being spent on arithmetic—teach music or something else—and so I say, "Well, if they want more time, we will give them the lower end of it."

Mr. FORRESTER. But why throw out arithmetic? Why not language or some other subject?

Mr. SENSENIG. Because they think arithmetic is less important. So we are trying to give them all the time we can. Arithmetic is mighty important—just as important as it was 20 years ago.

Mr. FORRESTER. Yes; it is so important that I think it ought to be taught the first year.

Mr. SENSENIG. When pupils come to school at 3 or 4 or 5 years of age, I don't want them to know anything about arithmetic until they are 7 or 8; but when they come to school at 7 or 8, I say yes, give it to them the first year.

Mr. FORRESTER. I would like to ask Mr. Haycock to give us something about the old-country system.

Mr. G. SIBLEY HAYCOCK, of England. I would much rather you would ask me something else, and I would like to ask a question myself. I would like to know how this convention stands with regard to this question of commencing instruction at 5 or 7. I hope you will excuse my going back to the period when Mrs. Hurd was

here; but this gentleman brought up the question of entering at 5 or 7, and could I have the view of the convention on this question? I will tell you why I am asking this. It is an exceedingly important point in the old country, this question of when shall the education of the deaf child begin, because it must stop with us at 16, so you can understand how important the age of beginning is with us. At present the compulsory age is 7. We want to make it 5, because there is a general feeling in the country that the two years from 5 to 7 is an age during which the child can make material progress. That is our opinion.

I should like to know what this convention thinks on that point. Particularly I should like the opinion of those who have tried to educate children at 5 years of age and under conditions different from the conditions you put the children of 7 under. I don't think that the opinion of any person is worth anything on this point if the children with whom that person has had experience, the children of 5, were dealt with under the same conditions as obtained for the children of 7. That is not a fair question. The 5-years-of-age children must be dealt with in a different atmosphere, a different scheme altogether.

Doctor HALL. Mr. Haycock, suppose we ask several heads of schools what age they think children should enter. We perhaps could get at it better in that way. It is very hard with a general gathering like this to get an opinion.

Miss LEONARD, would you kindly tell Mr. Haycock what is the lowest age at which children enter the Northampton School, the Clarke School?

Miss LEONARD. Very seldom under 5. Those that enter at 5 go through a process more or less the same as those that enter at 6. They live with those children.

Doctor HALL. Doctor Crouter, can you give us any information on that? I think it was Miss Upham's statement this afternoon that interested Mr. Haycock, that by the time her children who entered rather early had gotten to be 11 years old, she felt that those that entered perhaps at 7 years made just as good progress. Is that correct? Now, Mr. Haycock is inquiring whether those children that come in, say, at 5 or 6, whatever is your lowest limit, live with those others and go through the same, practically the same, process of instruction, or whether they have a separate group for the very young children.

Dr. A. L. E. CROUTER, of the Pennsylvania Institution. Sometimes they live together. It depends on the progress of the older children. Our experience is, however, in favor of a later age of admission. We believe that the age of 7 is the right age; some think the age of 6, but the age of 7 results in better work at, say, 16 or 18 years of age than the age of 5. The deaf child of 5 years of age too often looks upon the school as a sort of play place. It is difficult to maintain his attention and procure good results. That is our experience.

Doctor HALL. Doctor Crouter, if your State allowed you 10 years of instruction, or 12 years of instruction, would you rather put that in from the age of 7 to 17, if you had 10 years, or from 7 to 19 if you had 12 years, than to put it from 5 to 15 or from 5 to 17?

Doctor CROUTER. Or 5 to 20.

Mr. HAYCOCK. May I put the question another way?

Suppose the education of the child must stop at 16, would you think it not worth while to work for the commencement age to be lowered to 5 rather than to be kept at 7?

Doctor CROUTER. I think I would prefer that the age should be limited to 7. I should say the child would do more work and better work from 7 to 16 than from 5 to 16.

Mr. HAYCOCK. What I wanted to get at was with regard to the Mt. Airy School, whether those 5-year-old children were taught under the same conditions exactly as the 2-year-old children.

Doctor CROUTER. Precisely.

Mr. HAYCOCK. If so, then your experience does not satisfy our requirements, because we contend that that result is inevitable. We are not surprised with that. We have had that experience in the old country, but when we modified the conditions and created a new atmosphere, a new set of conditions altogether, suitable to the younger age, and brought the children under those conditions, they profited to the extent of it being worth while, and we are fighting in the old country to get the compulsory age of education reduced to 5 years of age. At present it is 7.

Doctor CROUTER. I think you make a mistake.

Doctor HALL. As the time is growing rather late, I would suggest that everybody be here promptly to-morrow at 9.30. There will be a very few announcements and immediately thereafter we will call on Doctor Crouter for his paper, which is on a very interesting topic that will, I am sure, give us a great many moments of thought, the question of the social worker in connection with the school for the deaf. I am sure that we can have 50 or 100 more people here to-morrow morning to listen to the paper, and I am going to ask your consent that we postpone it until to-morrow morning at 9.30.

Dr. HARRIS TAYLOR, of New York. Mr. President, some of the teachers in the schools in the State of New York have requested me to call a meeting of the teachers from that State in order to discuss the new pension law that was passed by the legislature of 1923. I wrote all very briefly what I thought were the chief, salient features of this law, but evidently did not go into it with as much detail as was necessary. Now, if we could meet to-morrow morning—what time do you suggest, Mr. Forrester?

Mr. FORRESTER. Nine o'clock.

Doctor TAYLOR. At 9 o'clock, then, we can assemble at the information desk or at the registration desk and then find some place in which we can meet and discuss this matter.

Doctor HALL. Are there any other announcements to be made? Please remember that to-morrow there will be demonstration work, beginning at 8.30. There will be a lecture here by Mr. Putnam at 8.30 on "Psychology for the teacher of the deaf." Then at 9.30 there will be a few announcements, and immediately thereafter Doctor Crouter's paper, and I am sure you will all be glad to listen to that.

(Whereupon, at 5 o'clock p. m., the convention adjourned until 9.30 o'clock a. m., Wednesday, June 27, 1923.)

THIRD DAY—WEDNESDAY, JUNE 27, 1923.

PROGRAM.

- 8.30 to 9.30 a. m.:
 Demonstration of oral class work. Grade 1, "Calendar and weather," room 1, Miss Gladys Bradley, Ontario School; "Primary arithmetic," room 4, Mr. E. B. Lally, Ontario School. Grade 4, "Language," room 5, Miss Catherine Ford, Ontario School.
 Lecture, "Psychology for the teacher of the deaf," Mr. George H. Putnam, Illinois School, assembly hall.
- 9.30 to 10 a. m.:
 General session, Doctor Hall presiding.
 Announcements.
 Miscellaneous business.
- 10 a. m. to 12 m.:
 Normal section, Supt. E. A. Gruver presiding.
 Paper, "Field officers, their duties and responsibilities, Dr. A. L. E. Crouter, Pennsylvania Institution.
 Paper, "Preparation and training of teachers of the deaf," Supt. J. W. Jones, Ohio School.
 Paper, "Normal training for the college graduate," Miss Ida Gaarder, Kendall School. Discussion, Dr. Harris Taylor.
 Paper, "Teacher training," Mrs. Sidney M. Moore, Florida School.
 Paper, "Training of teachers in England," Mr. G. Sibley Haycock, chairman of National College of Teachers, England.
- 1.30 to 2 p. m.:
 General session, Doctor Hall presiding.
 Paper, "Methods of instruction used in the Montreal Catholic School for Deaf Boys," Brother H. Gaudet, C. V. S. Discussion. Assembly hall.
- 2 p. m.:
 Address on education by Sir Robert Falconer, president of the University of Toronto.
- 3 to 4.30 p. m.:
 Art section, Mr. Lyman Steed presiding.
 Paper, "Art as it is taught to the deaf," Miss Ella V. Waugh, Pennsylvania Institution.
 Paper, "Art—What deaf pupils should and should not be taught," Mrs. O. A. Betts, Central New York Institution.
 Paper, "Art work," Miss F. W. Doub, Maryland School. Discussion.
 Paper, "Photography for the deaf," Miss Belinda Daniels, Illinois School. Discussion.
 Paper, "Design work," Mrs. M. M. Corey, Montana School.
- 4.30 p. m.:
 Conference on senior reading and senior geography, Mr. G. F. Stewart, Ontario School, room 3.
- 5 p. m.:
 Executive committee meeting. Kindergarten room.
- 8 p. m.:
 Lecture, "The prevention of deafness," Dr. James Kerr Love.
 Music and cards.

LANGUAGE, THOUGHT, AND PSYCHOLOGY.

By GEORGE H. PUTNAM, Illinois School.

The past as in a vision presents a long procession of children coming to our doors with that age-old question, "What good thing can you show us?" And I am sure we have been able to show them many good things, but for many years at commencement I have watched a company of these pupils on the verge of manhood and womanhood leave our schools, some with diplomas and some without, and I have wished we might have done more, that these pupils might have been made stronger in power to think, and more able to solve life's problems. "He only lives who thinks—all the rest are flitting shades."

I hope I am not coming here with a pessimistic whine. The pessimist says, "I could make a better world myself." And the optimist replies, "Sure, you can. That's what we're here for. Let's go." But when I talk psychology I fear many of you will think I am blowing bubbles. A questionnaire sent out to teachers to find out what questions they wished presented brought forth replies which showed 95 per cent desired language. The last question was, "Just for fun, mention something you don't want." And I was a little shocked to find that my pet study—psychology—led all the rest. So it takes all the courage I have to attempt a presentation of this subject. The mitigating circumstances are that successful teachers are using constantly psychological principles—"and a rose by any other name." But I believe psychology, and especially applied psychology, should be emphasized, and its principles organized, coordinated, and deepened, as one great need in solving the problems of education, as it is in solving the problems of life.

The trouble has been in the past that psychological flocks flew too high—metaphysical study is just coming to a realization of its practical applications. Psychology—how the mind works—is knowing how to operate a very delicate machine—the most important machine we have—and unless we know our work with it may be fruitless or even destructive. We have a simple experiment with the palm glass which correlates physics, physiology and applied psychology. By clasping the bulbs, one in each hand, one hand usually proves to be the warmer and drives the liquid into the other bulb. When this is determined the pupil is told to direct his thought to the colder hand. In a few minutes a test with the palm glass will prove that the hand toward which thought is directed has become the warmer. At the conclusion of one of these experiments a pupil asked, "If I can do that, is there any limit to what I can do with my mind?" And the only limit is something we can not imagine or a refusal to exert the will.

The flower of psychology is personality. If the ideal university is a log with Mark Hopkins on one end and a student on the other, it is because education would then center in a great personality, and with the power of personality gained all else that might be desired would be added. Any examination of the professional qualifications of the teacher will show the trend in recent years toward giving more importance to personality and less to scholarship and training. Looking backward in my own experience the beneficial thing, the lasting thing, has been the personality of a few among my teachers—to do the work was up to me, but the inspiration came from them. I have been interested in Bradford's series of articles in Harper's Magazine on "Damaged Souls"—men who had gone far on the way to the heights and would have been recorded among the great but for the single element of pride, or intolerance or envy or avarice, or some other trait of character which made them miss all the finer inspiration of life—men who lacked what every graduate of our schools should and can attain—a philosophy of life that will lead to happiness—not perhaps on the heights, but the law works on the plain as absolutely as on the heights.

The educational problem is a spiritual problem. I am not speaking in a religious sense, but of the inner man whose development makes the personality and character the creative force that makes a man all that he is or does or achieves. In my educational researches I have often wandered far from the beaten path of schools and educators. Lives of great men should tell us something—but they seldom reveal any royal roads. Work and the imagination are the foundation stones, and any normal child will develop on these two principles. In my studies I have often paused in thought upon a woman, who to my mind was one of the world's greatest teachers—the mother of Abraham Lincoln; for during the first seven years of his life she had, to quote her own words when the time came for her to leave him, given him her own heart, the disposition to be kind, and the spirit that climbs. "The ideal life is in our blood and never will be lost," said

Phillips Brooks. I hesitate to correct so great a man, and perhaps I do not understand the full force of his words, but to me the initial life is in the blood, the ideal life is in the stuff the mind feeds on, and mothers and teachers are the important factors. One sees in Lincoln a mental strength and penetration that could have crushed the average college man as easily as his physical strength could have broken their bodies. But neither of these points of superiority account for his power with men. It was his sympathetic heart coupled with a penetrating understanding of the common heart of humanity. And the secret I must ascribe as Lincoln himself has done to his mother's influence.

It is for this purpose that during these formative years instruction and personal influence must work together to develop this heart inspiration. The highest function of the teacher is not so much to impart knowledge as to stimulate the pupil in its love and pursuit.

The turning point in many a life has been some chance inspiration, some personal influence, or an idea gained through instruction. I believe in the story as an educational force, and to this end I believe much deadwood in our courses of study may profitably be cut out, and inspirational stories systematically arranged should form the foundation of our course. Ideas warmed by emotion are needed to vitalize our work. Once the mental powers are awakened the pathways lead into every field of science. I believe in the fable, the myth, and the fairy story, because the form in which they are given arouses interest and feeling, and if a wise selection is made the principles presented are the highest kind of truth, their adoption the best of wisdom. It is by such means that we put life into common things, even to drudgery itself. Without this training that points to an end education lacks vitality, it does not drive through, it does not form habits and create ideals. Principles are the only seeds that grow.

"We have gone daffy over things like steam, electricity, buildings, railroads, and airships, and we have forgotten the human soul on which all these things depend and from which all these things originate." So writes Roger Babson. We have made production of material things paramount and been indifferent to spiritual values. We are confronted to-day with many evil influences and never was there so much need of well-balanced minds, keen vision, sane judgment, and strong will. The study of psychology, as a science and as an art, will help us to organize and perfect the influences which mold character and personality, not with the assurance that some one will be made great, however desirable that may be, but that the combined influences will make a strong balanced life.

We are concerned with what we can know, but the only worth-while education is the kind that can be used and the final goal is not knowledge nor even the ability to use knowledge, but the will to use it. The world asks for the man who can be depended on. It is the result of instruction and training that leads one to say, "I believe," and "I will or I will not," a matter of principles, of character, and personality.

We shall not go far in our study before we must consider the subconscious mind, which is the heart of psychology. A great part of education depends on what we do consciously or unconsciously with the subconscious. It may not be profitable to take up a discussion of just what it is, but we may form some idea of what it is by what it does. It is the seat of memory and the emotions, the explanation of habit and skill, and the manager of all our internal organs. Its outstanding quality is suggestibility. Subconscious action goes on constantly and is especially strong during sleep. Almost every one has had the experience of waking at a certain time when a decision of that kind has been impressed upon the subconscious. One trained to this habit will do this as certainly as the hands will move at the command of the will. One naturally wishes to know how the subconscious may be trained to a higher degree; how mental pictures and ideas become realities; how problems are solved during sleep; how the subconscious is used in training the memory, and how it acts in the cure of disease or becomes an active agent in the cause of disease. It is our greatest asset, holding undeveloped riches of memory, energy, and creative ability, if we can learn to command it. The positive proof and explanation are found in the operations of hypnotism.

I am not going into these operations for the sake of hypnotism, but for the light it throws on some of the workings of the mind and the practical methods it suggests for the improvement of mental powers. When a person is hypnotized the conscious mind ceases all action, and whatever is suggested to the subconscious is accepted and acted upon, that is, operations are set in motion to carry out the suggestion. For example, if I hand a glass of water to the subject and tell him it is whisky the water will have all the effects that whisky would have in causing drunkenness. This shows how suggestion of illness may

cause real disease, and just as certainly do mental pictures of health impressed on the subconscious tend to cure disease. So ideas and character traits tend to work themselves out when a suggestion is given to the subconscious mind, unless the conscious mind is on guard and countermands the suggestion. Here is the principle of autosuggestion. The conscious mind may impress its own ideas upon the subconscious and this method is used in improving the memory and the formation of habits. Almost everyone has had the experience of laying down some article, and afterwards being unable to recall where he put it. One may easily form the habit of impressing the subconscious at the moment of putting the article down with the thought of just where it is. A practical application of this principle is the clincher at the end of a recitation in which there is a rapid summary of the important points of the lesson.

The mental pictures we paint in imagination and the thoughts we harbor continually, eventually work themselves out in life and character. This is the lesson of the Great Stone Face. Teachers generally might make a much greater use of suggestion. They might use it much more efficiently; for effective suggestion is not merely telling. Children have their mental feathers preened to shed telling and nagging. Suggestion must carry with force, yet so tactfully as not to rouse the antagonism of the conscious mind. Children may be taught to use autosuggestion for their own improvement in many ways.

Unless the conscious mind is constantly on guard, suggestions by pictures, stories, and personal contacts are getting by and registering in the subconscious; thus influencing our actions and forming our habits. This is the explanation of the great influence of motion pictures, the suggestion having great force because the conscious mind is usually in a quiescent state. This influence is especially strong among our pupils as evil suggestions lack the counteracting influences and discussions which characterize home life—with our pupils "seeing is believing." Our problem is to use pictures whenever we can as a basis for instruction and the correction of unwholesome impressions. A single impression on the subconscious—a brain track—may influence action and become the beginning of a habit. This is the explanation of impulsive acts, doing things before we think. Our course is to use counteracting suggestions of an opposite nature and arrange our course of study to establish correct habits which will meet and control all the usual circumstances in life.

When a person has been hypnotized and been put through a series of acts by suggestion and then brought back to his natural state he has no recollection of what he has done. The acts are registered in the subconscious and now the conscious mind is in control, but there is no connection between the two. If I now say to the subject, "Remember what you have just done," this suggestion serves to connect the subconscious with conscious mind and the whole scene passes like a motion picture through the conscious mind. This experiment gives us an insight into one of our most important problems, that of making quick and accurate connection between our conscious mind and the subconscious storehouse of memory. This may be made the basis of a rational training of the memory, the lesson emphasizing concentration and the habitual use of a direct subconscious impression as a clincher.

The problem is to train the subconscious mind so that even impulsive acts will be right, to train the subconscious and the conscious to work together in harmony—that is, to do what we know we ought to do. It is for the conscious mind to challenge all acts, thoughts, suggestions, and influences of every kind, to cast out the evil and hold fast the good and make a conscious effort to impress the subconscious with all that is desirable. The seed thoughts that we plant in the subconscious in this way will grow and bear fruit. "Let not the sun go down on your wrath" is not only moral but profoundly psychological. To train the subconscious, then, all that is necessary is to train the conscious mind along right lines including reason and judgment, with the habitual practice of autosuggestion to impress the lesson of the moment.

This naturally brings us to a consideration of psychological methods of training. A picture of the conscious mind should reveal something in the shape of a question mark. Its habitual attitude should be the challenge of the sentinel on guard; for all mistakes, confused ideas, and wrong impressions that get by and reach the subconscious will require from 7 to 7,000 impressions of an opposite kind to overcome them. Just as the alert eye looks out into space for things that may minister to our life, so the mind's eye should be in a constant state of mental projection. The questions "Why?" and "How?" may well lead, and the question "How can I use this in molding my character and building my life?" will set in motion the building operations of the subconscious and train us in the sense of proportion.

"Is it practical? Give me something practical," is the insistent demand, and I hope this demand does not mean some scheme of drill work that will obviate the necessity of thinking—something that will put up a building and at the same time leave out its foundation. Is it practical to know whether you are training the memory or simply stuffing it? The trained mind plus driving power wins. Brains are for use and not simply for storage purposes.

Is it practical to understand and use the dynamic power of suggestion on yourself and on your pupils—positive, massive, intense, but above all sympathetic? Have you an exercise every day for yourself and your pupils for the specific purpose of cultivating concentration—the power to focus all your powers on a single aim? Have you an exercise every day for using and developing the miracle worker of mind, the imagination, that functions in projection, the eye alert to see circumstances and conditions, and behind it the mind's eye to interpret, organize, and construct? And in this connection have you developed a lesson which starts a mental habit of asking "And then?" a habit that would bring to mind not only the anticipated night of pleasure, but the morning after? Not only the exhilarating glass, but the final gutter. Is it practical to present a lesson and inaugurate training that will form the habit of asking in regard to all one's work, "Is this act complete?" It can be done—and what will be the probable result of such a habit? Ask any business man. Have you tried to develop a mental attitude absolutely impervious to the "slings and arrows of outrageous fortune," and an attitude that will relieve nerves pinched by the emotions?

Are you using and teaching the use of relaxation? The Indian knows it—he does not use 10 muscles when I will do the work. The wrestler knows it—he goes into the struggle perfectly limp till the moment of contact, then every nerve tense. The cat and the tiger are great teachers on this point. Both mind and nerve will respond to this treatment.

Have you sought the ultimate source of power—faith, that will not wince under the bludgeonings of chance, and breathes—

"I am the Master of my Fate,
I am the Captain of my Soul."

Does the future of the world look dark? Well, the only thing you can do is to raise the percentage of faith—that's your share. Are you using ways to increase faith in yourself and your pupils?

The genius of the teacher lies in isolating an object, a fact, or a principle so clearly and associating it with the word for its expression that the pupil makes no mistakes in his first impressions. Then not drill, but as many repetitions and applications under conditions that associate the expression clearly with the concrete. On this foundation we may build with the science and art of psychology. I have already touched on some of the methods which may be used in developing lessons and expressed my faith in the story. Every lesson should have a point, not necessarily a moral, but something that makes the lesson significant. The pupil who writes correctly in regard to the details of a certain picture is to be commended, but if he leaves out the important point that the boy in the picture is planting seeds, thinking power needs further development. It means a sense of proportion.

I have found it a good plan, unless a story is very short and treats of but a single point, to give the story in installments. This gives opportunity for questions in regard to what is coming in future installments, discussions confined to a single issue, forecasts as to the probable course of the story, and problems to be worked out in the development of the plot. Every occasion is used to introduce the real conversation or an imaginary one on points raised by the story for the purpose of training the imagination and exercising reason and judgment. This exercise demands an intensive study of the principles presented and calls for language adapted to a new setting—an acid test as well as an exercise of high value. Every opportunity is seized in these training methods to send the mind investigating, to choose such exercises that original thought is developed, and to provide tests which prove conclusively that mental power is being developed. We have the search for ideas, their evaluation, their application, their fitness to be adopted in a plan of living.

I can not forbear at this point to emphasize the value of drawing to illustrate lessons. I would like to give the history of some of these cases whose mental processes have been completely revolutionized, their study vitalized and ideals formed by the use of exercises in drawing, but there is not time. It is a test and an exercise in realization and readily works into exercises in originality and invention.

One more point that is necessary to permanent results is systematic review. One can not learn a thing to-day, drop it, and pick it up again when there is occasion for its use. Review is needed, but not the kind that is merely repetition. New associations and new applications will bring renewed interest and form the ties which hold subject matter in the mind and render it useful. I have called this method the rolling snowball review, for at every revolution it picks up something new and grows with the rapidity of geometrical progression. "Come, let me show you," says the wise teacher.

I have mentioned faith as the ultimate source of power. No one studies the New Testament without being deeply impressed by the Master's references to faith. "According to your faith be it unto you." No one can read history and miss the emphasis placed on faith. No system of education can be complete that does not strive to master this problem and answer the prayer—"Increase our faith." I shall not try to define faith, as I should probably get as near to it as the boy who said, "Faith is trying to believe what you know is not true." We are born with an inner urge to action. Faith emerges when we take our first steps. We keep moving toward one goal or another all our lives, upward to the heights so long as we have faith, but lacking this a rapid descent to the grave. The impetus by which we go forward lies not in our ideals, but faith in our power to realize ideals. This is vividly impressed as we read the story of the dark hours of Washington and Lincoln. Faith is the force of gravitation in the spiritual world. I think many of us have been brought up to consider faith exclusively religious, concerned with another life and not intimately related to the laws of our being and a vital factor in our attainments. Should not education break down the artificial wall that has been built up between the religious and the natural life?

There is an art of faith. To increase faith we must provide exercise for feeling, thinking, doing. Stories selected for their vitalizing quality, the constant use of autosuggestion have been mentioned. Opportunities must be given for the pupil to assume responsibility, to lead and direct, to act and achieve. The faith that attempts great things is built up by victories in small things. The teacher's use of suggestion, both consciously and unconsciously, will be found one of the strongest of influences, provided the teacher is alive, growing sympathetic, earnest, and possessed of that invaluable quality we call vision. May I speak of prayer, another word that defies definition, but is nevertheless a vital element in our unfolding life. Perhaps Abraham Lincoln's interpretation comes the nearest to being a practical use of prayer. When a delegation was leaving the White House during a crisis in the Civil War, one of its members remarked, "Mr. Lincoln, I hope the Lord is on our side." To which Lincoln replied, "With that I am not concerned, but I am concerned that we should be on the Lord's side." Prayer used as a practical influence and force should seek to crystallize purpose, generate faith, and organize the elements of our being to cooperate with law. We should seek to put ourselves in harmony with universal principles.

It is difficult to present in so short a time a subject that covers the universe, man the greatest thing in the world, mind the most wonderful thing in man, and reaches its climax in faith, the greatest power in man. If the main object of our work is to think efficiently, then the subject of psychology becomes interesting as a study, important as a working system in efficient life, and essential to a beneficent philosophy of life. Education is just beginning. The science and art of applied psychology is in its infancy. Teachers with vision seeking opportunities to promote education, to grow and get more out of life, may well take up this work. You carry with you the best experimental laboratory in the world in your own mind and heart, and accessories are found wherever you go. The elements of power and happiness do not usually rise from any deep moral or intellectual superiority, but rather from the balanced development of all sympathetic qualities. Our courses of study should first of all gather the great truths concerning personality and life. Seeking first principles we may be sure that all necessary facts will be added. Our problems are not what is wrong with the world, but they are individual problems to develop ourselves and our pupils to the highest degree. The study of psychology will teach us to think more clearly, be more efficient in whatever we undertake, build up our vitality, and develop all mental powers in a unity of human evolution that means power, purpose, and progress.

I remember, several years ago, an old colored woman used to do our washing. One day she asked, "How do you say p-s-y-c-h-i-c?" I replied, "Psychic. How did you happen to hit on that word, Mrs. Johnson?" "Psychic—psychic—well, I's studyin' psychic problems." "Does that help you with the washing?"

"Sure it does—it's the attitude." So if washing is made easy and becomes a work of art by the mental attitude, what vision arises when a teacher looks into the faces of her pupils? This vision with its accompanying zest in work and life is the nightingale's song. I hardly need to recall the old story of the monk who wandered into the forest, heard the nightingale break into song, paused for a moment, thrilled by its enchanting melody, and on his return to the convent there was no one to recognize him—he had been absent 40 years. To-day's interest, zest, and fidelity swing the eternal forces of to-morrow. Our great work is to arouse the spirit.

MORNING SESSION.

The convention reassembled at 9.30 o'clock a. m., Dr. Percival Hall presiding.

Doctor HALL. The meeting will please come to order.

This morning we have just a few announcements to make before going on with the paper by Doctor Crouter, which was postponed from the program yesterday.

I will call your attention first to the business meeting which will be held to-morrow, Thursday morning, at 9.30. Please remember that that is a business meeting and that it will be only for the transaction of business of the convention, and will be, of course, open only to members of the convention. All those who are members we hope will be here. We also hope that everyone who is in attendance at this meeting will become a member of the convention if he or she has not yet become one.

Our treasurer, Doctor Long, will prepare a list of all members, and if any of you are in doubt as to membership fees—whether or not you are still on the roll—you can consult him and his list and know whether or not you are entitled to vote at our business meeting. I will ask Doctor Long to make a short statement in regard to the matter of fees and dues.

Dr. J. SCHUYLER LONG. The constitution provides for two kinds of membership, active and honorary. Only active members may vote and hold office. The membership fee is \$3. In addition to that, all who attend the convention are required to pay a registration fee of \$1. Custom has established that all who make their home in the institution are required to pay the membership fee of \$3 and the registration fee of \$1. The institution offers its reduced rates and its facilities and accommodations to members only. All persons, whether they are honorary or active, are required to pay the \$3 if they stay at the institution. Sometimes there has been a little misunderstanding about that, and some think I have been trying to get more money out of them than they ought to pay, but as I say, I am simply following the custom that was established, I think, in Utah when I was there in 1908. Do I make it clear? All who enjoy the privileges of the institution are required to pay the membership fee of \$3 and a registration fee of \$1.

I think if you will figure up the amount you would have to pay outside and the difference in the reduced rates the institution offers you, you will see the advantage of paying us.

All who enjoy the privileges of the meetings here, living outside, are still required to pay the registration fee of \$1. I presume, of course, that all who are actively engaged in the work will want their names on the membership list, whether they live in the institution or not, but that is, of course, a matter for them to decide. I will

keep after you for your dollar if you come to the meetings, and when you pay your dollar for registration fee you get the badge of membership.

If I have not made the matter clear, ask me and I will try to explain it again.

Doctor HALL. We will have the pleasure this morning of listening to Doctor Crouter, who has prepared a paper on field workers, their duties and responsibilities.

Doctor CROUTER. Members of the association, I apologize for not being present on time yesterday afternoon to read this paper. It is upon the subject of field officers, their duties and responsibilities.

FIELD OFFICERS—THEIR DUTIES AND RESPONSIBILITIES.

Dr. A. L. E. CROUTER, Superintendent of the Pennsylvania Institution.

In some of our larger American boarding schools for deaf children, and perhaps also in a few of the smaller ones, possibly, too, in some of the day schools, the problems attendant upon the after-school life of the pupil are a matter of serious concern to those charged with their management and control. What do our pupils do after leaving our schools? Who looks after them, and how well? Have our schools and we as superintendents and teachers any further responsibility or further duty or concern regarding their welfare in life after passing from our immediate care? These are weighty problems deserving the careful consideration of all thoughtful teachers and heads of schools.

It is true the brighter minds, the members of the graduating classes and a few others, may be said to be fairly well equipped to meet the trials that are sure to confront them on leaving our schools, but those of lower grade, and there are many of them, must needs be looked after if they would escape the pitfalls that so frequently confront them.

It may be said, probably will be said, that the school and the State and community have performed their full duty when the doors of our schools have been closed upon the retreating forms of our pupils, and that their future must be left dependent upon themselves and upon their parents and relatives.

But is this cold and possibly indifferent attitude altogether the proper one? Has not the school still a duty remaining to be performed if it would meet fully all that may properly be demanded of it by an observing and deserving public? For be it observed our schools derive their support from the public, and the public has therefore the right to demand that every effort shall be made to serve her best interests.

The purpose of this paper is to point out how some of these rightful demands may wisely and prudently be met. These demands have been partially recognized and partially met through correspondence by a very few of our schools, but beyond letter writing and a very few personal visitations nothing has been systematically carried out or even attempted.

During the past year and a half the Pennsylvania Institution at Mt. Airy has formulated a practical plan to meet, in part at least, the after-school conditions of its pupils by the appointment of an official known as its field officer, whose duty it is to carry into effect in a systematic way the plans of the school to continue its work after the pupils have left its doors. A field officer, be it said a perfectly peaceful official, has been appointed with distinct duties and responsibilities assigned, which it will be my purpose by your forbearance to set forth in this paper.

First of all, then, what manner of man should this field officer be? By way of reply to this perfectly natural and reasonable question, I would say that he should be a man enjoying good health, of fairly liberal education, of considerable experience in school affairs, a man acquainted with the methods and purposes of the special school he is to represent. He should, in particular, know his own school, its history and traditions, its management, its teaching staff, and the methods and results of its work. In conducting the business of his position he should be able to sink self wholly in the discharge of his duties and not allow other interests to interfere with his work. He should be capable of arousing in parents a high sense of duty in the education of deaf children and in aiding them to pursue a course in life that shall result in their greatest happiness, intellectually, socially.

morally, and religiously. To do this alone is no small task and should call forth his best efforts. In addition he should be a good mixer with all classes, the poor and the well-to-do, the ignorant and the educated, the business man and the professional man. He should be able to arouse the public interest by addressing teachers' institutes and other educational and cultural gatherings, to elicit the cooperation of public-school superintendents, of the principals of schools, of teachers and nurses, and to seek the aid of welfare societies, of children's aid societies, and of probation courts and officers. Indeed, he should be able to secure the sympathy and support of any and all agencies that may aid the purposes of the school he would represent.

Again, he should be sufficiently acquainted with methods of instruction to enable him freely to advise parents as to the best time at which to place their children under formal instruction, how to adapt methods for conducting home training, for enforcing home discipline, frequently so difficult to secure for establishing hours of rest and recreation, and plans for securing sound bodies and vigorous minds in their children before sending them away to receive formal instruction.

The advantage of personally securing all this preliminary information will at once suggest itself to heads of schools.

He should make it his business whenever possible to aid the former members of his school, and the members of other schools whom he may chance to meet, to secure such remunerative positions as they may be fitted by inclination and training to fill. His interest and assistance in many instances in such cases will very often prove of much importance.

It is a source of much satisfaction to be able to state that in general employers speak in high terms of the faithfulness, industry, and skill of their deaf workmen. Said the superintendent of a large steel mill in one of our large cities, "I want no better workmen than my deaf employees; if you have any more like them, send them along, and I will give work with good pay to every one of them."

In the discharge of his duties, the field officer should be directed and required to visit shops, farms, factories, and industrial plants of all kinds to ascertain directly of employers as to the nature and quality of the work required of their deaf employees, the wages paid them, and as to whether or no, they give satisfaction in the discharge of their duties.

The reflex effect on former pupils upon receiving visits from the old school in the person of the field officer, as may well be imagined, is very marked. It gives them a better opinion of themselves and of their work, it excites their pride, and their loyalty for their alma mater and a sense of their importance as workers and breadwinners, and, too, employers on their part, upon discovering that an official representative of the school may be expected from time to time to look after the welfare of their deaf workmen, exert themselves more than they otherwise would, to see that they receive fair and just treatment.

Among other duties that naturally devolve upon the field officer is that of investigating the home conditions of the pupils he meets. He accompanies them to their homes, making inquiry as to their health, their pleasures, their moral and social standing, their business relations, and their preference for and attendance upon church duties. He strives to find out just how they live. All this takes time but it pays, as all good work does.

Another important duty may be urged upon the attention of the field officer. He should be required to look up new pupils of the proper age for instruction, to inquire carefully by means of simple tests as to the degree of their deafness and as to their mental and physical condition; to give information regarding the work of the school and general advice as to when and how parents may avail themselves of its advantages. In particular, he should be charged to make careful inquiry regarding doubtful cases, their mentality, their hearing, if any, their personal habits and their physical condition in general in order that the school may avoid receiving children who should, probably, be placed in the care of correctional and custodial institutions.

The field officer, to be fully prepared for the complete discharge of the many duties that from time to time may devolve upon him, must have a large acquaintance with the deaf and the methods pursued in their instruction. He should have knowledge and training regarding the application and value of oral methods, of the possibilities and use of the language of signs, and of the advantage and use of manual alphabet methods. He should also have a liberal acquaintance with the literature pertaining to the deaf as a class and their care and training as individuals. In short, he should be a well-armed representative of the particular school he would serve, capable of entering into all phases of deaf-mute life,

educationally and socially and morally, of meeting the deaf on their own grounds and entering whole-heartedly into their pleasures, their hopes, and aims in life.

He should be required to make frequent and accurate reports to his superior officer giving in detail complete account of all traveling expenses, of all incidents of moment attendant upon his special mission, together with any suggestions that may tend to the uplift of the deaf from any and all angles.

It is my belief founded on experience that the efficiency of our schools may be greatly widened and broadened and made more effectively to subserve the important purpose for which they are founded and maintained by pursuing some such course as herein outlined.

In closing, I may be permitted to quote briefly from the report of our field officer for last year.

I am always on the lookout for former pupils and for the deaf in general. I find them nearly everywhere. They are engaged in various kinds of work, always depending largely upon the industries of the different sections in which they reside. I find that those who have remained in school until they have graduated and learned their trades well, and then have followed them, as a rule seem to be doing best.

All of the deaf are industrious; most of them have good homes and many of them have very snug bank accounts. Some of them have entered the business world and are doing well. At first I thought that the certain trades taught in the schools offered better advantages than others, but after finding one of our baker boys buying his flour by the carload and catering to a large wholesale trade that demanded a truck for the delivery of his goods besides conducting a fine store for his retail trade, after finding one of our graduates running the leading art studio in a city of 35,000 inhabitants, after finding one of our shoe-shop boys owning a home that cost him over \$7,500 here in Philadelphia, all earned in his own shop, after finding one of our printers earning \$54 a week regularly, and finding others living in most modern homes with the finest kind of furniture and others of various callings with from five to seven thousand dollars in the bank, after finding all these things in my travels, I have changed my mind. The results are not so much to be found in the trades the pupils have learned at school; they are rather to be found in the man. Any trade taught in this school (Mount Airy) is a sure road to success if the boy or girl will learn it well and then stick to his job.

It should be very gratifying to the household department to learn that deaf girls make splendid home makers. It is rare indeed to find the home of a deaf woman out of order. They are able to do so many things themselves that the average housewife would spend extra money to have done. The training that deaf girls get in boarding schools in household duties sticks to them through life. They make good wives and handle their husbands' earnings with care and good judgment.

The influence of our female pupils from foreign homes on the home management is very marked. A touch of American housekeeping is put into effect as soon as our larger girls return for their vacations, thus indirectly benefiting every member of the family. Some of our older girls give their homes a regular overhauling and cleaning up as soon as they get home.

I am sure that my visits in the counties I have gone through have created a new and stronger interest in the education of the deaf and that practically all parents of deaf children will soon be told of the opportunities offered by the State for their instruction.

The State department of special education is cooperating with the work of my department. I know of several cases where the department has strongly advised parents to send their children to the Mount Airy and other schools for instruction. Its officers have requested me to keep them supplied with suitable literature to be placed in the hands of parents of deaf children. I am doing so.

To this, interesting as it is, I would add that the expense attendant upon the labors of our field officer has been considerable, but it has been richly repaid in the wider publicity given the work of the school, in its increased attendance, and in the more numerous applications received for admission, in the marked uplift of the deaf of the State themselves, and in the deeper understanding and appreciation of the work and purposes of the school that have been established among our patrons and in the mind of the general public.

To sum up the whole case in a few words: The plan has passed the experimental stage successfully. It is found that the maintenance of a field officer or worker as a regular member of the institution staff keeps the work of the school in its many phases, completely, continuously, and intelligently in touch with public requirements, and well repays all the labor and expense incident to the creation of the position.

Doctor HALL. Doctor Crouter's very interesting paper calls for discussion by Colonel Smith, of the Illinois school, and by Superintendent Booth, of the Nebraska school. Colonel Smith, will you take the platform?

Col. O. C. SMITH, of the Illinois school. Mr. Chairman, members of the convention, the subject as presented by Doctor Crouter is of very great importance to the people that are interested in the education of the deaf. If I did not know better I would believe that Doctor Crouter has attempted in his paper to draw a mental picture of the social-service field workers we have attached to the Illinois School for the Deaf. Had I written a paper on this subject I would have agreed with practically everything that Doctor Crouter has given you in his paper.

I will say, however, that there are a few things that I could not quite agree with. In speaking on this subject briefly I want you to understand that I am talking from the standpoint of an Illinoisan, and one thing in particular that was in the paper that would not be very beneficial and would not be tolerated in the State of Illinois would be the school at any time or at any place or in any manner attempting to go into the religious side of the lives of the pupils after they left school or before. We have a law in our State that you can read the Bible in the schoolroom but you can not comment on the section that you have read. So we stay very clear of all religious connections in our schools.

The most important thing that a social-service field worker does, in my judgment, is going out into the State, getting in touch with the parents that have children that should be in the schools, and convincing them of that fact.

Our social-service worker spent all of her summer last year in two counties in southern Illinois, and discovered in the county in which I had lived for 25 years nine children that were deaf that I had never heard of. The same condition prevailed in the other county that she spent a part of her time in. So you may see readily that one social-service worker, as we call them in Illinois, could not begin to commence to start to do the things that Doctor Crouter says should be done by a social-service field worker.

The work of which we are speaking is of very large magnitude, and there ought to be a staff of social-service field workers. Some of them should go out and secure the information relative to the children in the different counties that should be in the school. They should be equipped, as has been said in the paper that was read, and they should have pictures of the school that the children are to attend. They should have all information at hand that would be necessary to convince the parents that it was the proper thing to send that child to the school. Why, we find—and I presume it is so in every State—that it is just like pulling eyeteeth, if you will pardon the expression, to get certain parents to send their children to the school. I have in mind one lady who came with her boy, and she stayed right across the street from the school. She would go into the dormitory and see that this boy had a proper bed to sleep in, and she went into the dining room to see that he got mashed potatoes, because that was all he would eat at home, and she had to see that he was so treated in the school. She stayed there until finally we just had to tell her that she had to get out and give us a chance to get a grasp on the

boy. She went away as mad as she could be, but came back in about a month and a half and saw the condition of her boy, and she then was perfectly satisfied.

Now, had that mother been met before she brought the boy to the school by a social-service worker or a field worker, as you may call them, that knew his or her business, and had been able to convince that mother that the school that she was sending the child to was not a penitentiary or a custodial institution, or some place where a child would be buried alive, she would not have had that trouble.

I do not quite agree with the paper on the proposition that we should act as an employment agency after the school life is ended. I do not see the necessity of burdening the school with that additional work. The school has, in my judgment, all that it can do to secure the attendance of these pupils and then give them the proper education, and when they step out of the school into their homes it then becomes a community problem, in my judgment, as to the future of those children. I do not mean that the duties of the State should cease, but I do think that the duty of finding employment for those people and looking after their employment in the future should be delegated to some other State agency than the school, because we have, as I said before, plenty to do.

In Illinois we have free employment agencies scattered all over the State. In every town of 5,000 and up there is a free employment agency, and what I advocate in this connection is to have in those free employment agencies some such person as Doctor Crouter mentioned in his paper, who would be able to look after the employment of the people that are deaf, the same as they have special people to look after the employment of the hearing.

There is one thing that I want to call your attention to in connection with this work that we find in our schools to be of great value, and that is having this field worker at the school most of the time when school is in session. The officer that we have has helped us to solve many problems that have arisen in the school about children writing home about conditions in the school and the parents writing in about things that were wrong, simply because she has been in the home of this child. She knows the father and mother; she knows the home conditions, and therefore she is able to smooth out these little troubles much better than we would be able to if we did not have any knowledge of the conditions of the home, and so on.

Just one illustration of how knowing the home conditions solved the problem for me and I will close. I came from southern Illinois, in the coal-mining district, where we have every class of people in the world working in those mines—good, bad, and indifferent, Polish and all other nationalities. We have one home down there that it has been my misfortune to be in a number of times when I was acting in the capacity as attorney for a city that is a disgrace to the community. The father and mother are both drunkards, and I have an idea that if we would step in their basement this morning we would find a still running there, although the United States is supposed to be prohibition territory. Unfortunately there is a boy in that home who is deaf, and he is now in the Illinois school at Jacksonville, or was last year. This boy got into some trouble in the dormitory, and I had him in the office talking to him, and he said, "Well, I'll just go home. I'm going to run off. I'm going to go home." Well, he

just thought, you know, that that would knock me for a row of silos, as they say in slang. I looked at him a little bit and then I told him through our social-service worker, "In the morning you pack your suit case. You get on the train. You go down to your home town. You go out to that home where that drunken father—drunken step-father—and mother of yours are, and you live the life that you have lived down there, that you have been living, if you think that is the way you want to live the rest of your life." The boy said, "I'm not going home."

I just give that illustration because it shows the benefit of having somebody at the school that has been in the homes of the children and knows their environments and their surroundings. It gives you an avenue by which you can approach them where you could not otherwise.

I hope to see the time when we will not have to put up with one social-service field worker in Illinois. I feel that Illinois, with its great mass of population in the coal fields and the city of Chicago, should have at least 8 or 10 social-service field workers. We could use them to great advantage. In the main, outside of the religious proposition, I heartily agree with the paper as read by Doctor Crouter.

Doctor CROUTER. I would like to correct Colonel Smith's statement in regard to the religious proposition.

Our field worker does not attempt in any way to interfere with the religious susceptibilities of the deaf pupils and workers that he meets. Far from it. He encourages them to attend the religious services of their church, whether Protestant, Catholic, or Jew. We make no attempt at what may be regarded as sectarian instruction in the school, and the field worker would not be permitted to make such attempts in connection with his work outside of the school.

Doctor HALL. We will now hear from Superintendent Booth, who is also on the program to discuss Doctor Crouter's paper.

Mr. FRANK W. BOOTH of Omaha, Nebr. Appreciative of the crowded condition of our program this morning I will not read the paper that you see before you, but will beg you to indulge me with the privilege of reading extracts that I think may be pertinent to the question, and possibly be of interest.

FIELD OFFICERS—THEIR DUTIES AND RESPONSIBILITIES.

By FRANK W. BOOTH, Superintendent of the Nebraska School for the Deaf.

We have had in the able paper just read a presentation of the subject of the field-officer method of rendering assistance to the deaf to the extent and in ways that assistance is needed by them, both before entering, and after leaving school. It is a close-up view that is given us of the system so far as it has had trial in practical operation, in connection with one of the largest and most progressive schools of the country, therefore with all factors involved and all principles operating visioned to us in large proportions. Pennsylvania is in fact giving us a testing out of the field agent or field-officer system under the best of conditions for demonstration of the measure of its practicability. Results of the further trial of the system will be looked for with interest, not to say with hopeful anticipation.

May we not conceive that the field-officer system will in the course of time come to a degree of development and perfection where it will function in the searching out and uncovering of all defective, misplaced, or nonplaced elements in the great social organism, much as does the ingenious X ray device in revealing otherwise hidden defects and misplacements in the individual human organism?

It is obvious that if we do not look for hidden defects in our work we will not see them, and if we do not employ available help to aid our vision, many defects that might easily be seen through their use will remain concealed or unnoticed. And that is the trouble with our easy-going system, or lack of system, of the past, relative to this before and after school care of the deaf, a system that, to be sure, and in spite of its lacks, has conferred great benefits upon the class. But it is the unseen, the overlooked of the class that must also enlist our thought and concern. We have in the past looked for and seen the plainly visible, the children who come to our school naturally, automatically as it were, almost without effort on our part, and for whom we have done our full duty so far as schooling goes; but what of the children whom we never see, of whom we never hear, who because of our ignorance of their existence grow up without enjoyment of school training?

These, and they are numerous we may believe, are the ones that must enlist our concern, that must be uncovered to our sight through the field-officer system, or any system indeed that may be effective of desired ends.

I have ventured the statement that the unschooled deaf are numerous. I am the more convinced of this after a study of available figures giving population and school statistics in comparative measurements. In this study I have gone to the trouble of compiling a table showing, in one column, the States in their order; in a second column, the 1920 United States census figures of population of the States; in a third column, the number of pupils in attendance (October 20, 1922) upon the schools for the deaf of the States; and in the final column, the figures showing each State's ratio of deaf-school attendance computed for each 100,000 of population. We thus have in the table an X-ray photograph as it were of the entire country, showing its dark spots of small school attendance and its light spots of large school attendance, with the varying shades between, each showing larger or smaller school attendance relative to the common unit of population. The table follows:

State.	Population.	Pupils in all schools.	Pupils per 100,000.	State.	Population.	Pupils in all schools.	Pupils per 100,000.
Alabama.....	2,348,174	199	9	New York.....	10,385,227	2,058	20
Arizona.....	334,162	41	12	North Carolina.....	2,559,123	368	14
Arkansas.....	1,752,204	290	17	North Dakota.....	646,872	104	16
California.....	3,423,861	378	11	Ohio.....	5,759,394	832	14
Colorado.....	939,629	143	15	Oklahoma.....	2,028,283	335	17
Connecticut.....	1,380,631	277	20	Oregon.....	783,380	146	19
Delaware.....	223,003	.....	.....	Pennsylvania.....	8,720,017	1,186	14
District of Columbia.....	437,571	47	11	Rhode Island.....	604,397	106	18
Florida.....	968,470	173	18	South Carolina.....	1,683,724	214	13
Georgia.....	2,895,832	261	9	South Dakota.....	636,547	80	13
Idaho.....	431,866	69	14	Tennessee.....	2,337,885	263	11
Illinois.....	6,485,280	851	13	Texas.....	4,663,228	603	13
Indiana.....	2,630,390	319	11	Utah.....	449,390	131	29
Iowa.....	2,404,021	284	12	Vermont.....	352,428	44	13
Kansas.....	1,769,257	212	12	Virginia.....	2,309,187	260	11
Kentucky.....	2,416,630	331	14	Washington.....	1,356,621	213	16
Louisiana.....	1,798,509	205	11	West Virginia.....	1,463,701	175	11
Maine.....	768,014	104	14	Wisconsin.....	2,632,067	593	22
Maryland.....	1,449,661	256	18	Wyoming.....	939,629	.....	.....
Massachusetts.....	3,852,356	553	14	United States.....	105,710,620	14,878	14
Michigan.....	3,668,412	588	16	British Columbia.....	524,582	65	13
Minnesota.....	2,387,125	350	15	Manitoba.....	1,956,082	156	8
Mississippi.....	1,790,618	176	10	Nova Scotia.....	1,000,328	109	10
Missouri.....	3,404,055	465	14	Ontario.....	2,933,662	285	10
Montana.....	548,889	62	11	Quebec.....	2,361,199	427	18
Nebraska.....	1,296,372	207	16	All Provinces.....	8,788,483	1,042	12
Nevada.....	77,407	.....	.....		
New Hampshire.....	443,083	.....	.....		
New Jersey.....	3,155,900	324	10				
New Mexico.....	360,350	.....	.....		

¹ No school.

² No school attendance reported.

It will be noted that the ratio of the school attendance to the population varies greatly—from 9 in each 100,000 of population in some States to 20, 22, and 29 in each 100,000 in other States; also that the ratio for the entire country is the median number 14 for each 100,000. The question must arise in every mind, why do these differences, and more especially the extreme differences, exist? In lack of definite information bearing on the subject any answer that might be given here to-day would be little more than a guess, which guess it

will be conceded might be wrong, therefore, without venturing an answer, I may note certain known facts probably having at least some bearing in the case, namely: New York with its ratio of 20 deaf children in every 100,000 unit of population has 12 boarding and day schools conveniently located in various sections of the State; Wisconsin with 22 pupils in school in every 100,000 of its population has 25 day and boarding schools likewise conveniently distributed over the State; Utah with 29 pupils in every 100,000 of its population has a single school, a boarding school. However, Utah is unique in its location, also in the fact that it receives pupils from the Provinces of Canada. It has a State to the west of it, Nevada, and a State north and east of it, Wyoming, neither of which has a school for the deaf within its borders. These States send their deaf children to neighboring States, paying such States a fixed sum for the cost of board and tuition. The Nebraska school had, I may say, eight such pay pupils from the State of Wyoming during the last year.

But where are the missing deaf children of the States counting but 9, 10, 11, 12 deaf children in school per unit of population where other States, and not a few, have 18, 19, and 20, in the same group of the general population. Have these latter States more children born deaf or made deaf by disease than the former? If so, it is in truth a situation for the medical fraternity to investigate and report upon; but if not, if there are in fact just as many, or approximately as many, deaf children in one section or unit of our country's population as in another, then the whole question is thrown back upon us for answer. Where indeed are the missing, the hidden children of the small school-attendance areas? And how shall they be uncovered to full participation in the school privileges provided? Of one thing we may be assured, it is not a question of geography, for going over our map we find one State in the East with a school-attendance of 12, while a State adjoining it has an attendance of 18—or 50 per cent more in the given unit of population; likewise, in the South, two contiguous States have, one of them an attendance of 9 and the other 18—that is, just double. Again, in the West, similar extreme differences exist in the ratios of school-attendances as between neighboring States. May we not, therefore, after this survey conclude that the school attendance in the various States is not controlled by geographical or local conditions, so much as by differences in methods employed by the different States in seeking out the deaf children within their borders. Some States have the field-officer or field-agent method, for the most part recently inaugurated, therefore in a largely trial stage; other States have compulsory education laws more or less effective; still others receive reports from county superintendents more or less regularly. It may be believed that the first, or field-officer method, is the best of all these methods as so far demonstrated, and it bids fair to grow to become finally the all-prevailing method. And if it is indeed best, it should become all-prevailing, for the proven best for any State must be best for all the States and should be adopted and practiced by all.

It may be prophesied that the day is coming, is indeed near at hand, when every State will have awakened to the necessity for the creation of an agency for seeking out systematically its otherwise hidden-away deaf children and that there will thus be brought into existence a new profession, or a new branch of our own profession, to function in helpful collaboration with us in the doing of the great work we have in hand. Such a group will have then its accredited representatives at our conventions and they will be indeed a help to us as bringing us expert testimony on this great problem to enlighten and guide us to its best and fullest solution.

Doctor HALL. This is a very important question; no doubt one of the most important that will be taken up in our various institutions, and has been most ably set forth this morning. I wish we could spare a little more time for its discussion. I hope, however, that you will take the opportunity to discuss with Doctor Crouter and Colonel Smith and the representatives of the Wisconsin school, which I believe has such a social worker, their experiences on this line. It is now time for us to go ahead with the work of the normal section.

To-morrow, Thursday, I want to call attention to the business meeting. At what time was it?

Doctor DOBYNS. You fix the time.

Doctor HALL. At 9.30. I now have the pleasure of turning over the meeting to Superintendent Gruver, chairman of the normal section.

NORMAL SECTION.

[Supt. E. A. Gruver, presiding.]

Mr. GRUVER. We have a very full program for the rest of the morning session, but before we start I just wish to add a word to Doctor Crouter's paper.

We have in the State of Iowa what we call a "field agent." Her services have been very valuable indeed. The school has increased in the last four years from 170 children to 250. I wish to say that a large share of that increase in pupilage is due almost entirely to the efforts of our field agent.

I agree with Doctor Crouter in nearly everything he said as to the great value of such an agent, and I hope the time is coming when all of the States may have an agent of that kind going about doing good, as we have found the one in Iowa doing.

The program for the rest of the morning is composed of four very interesting papers on the training of teachers. There is no more important phase of the education of the deaf than teacher training. The social worker is of very great value in our work; the teacher is, of course, much more valuable.

Without any further preliminaries I shall call upon Mr. Jones to present his paper to the convention on the preparation and training of teachers. Mr. J. W. Jones, of Ohio.

TRAINING AND PREPARATION OF TEACHERS OF THE DEAF.

By J. W. JONES, Superintendent of the Ohio School for the Deaf.

Mr. Chairman, members of the convention, ladies and gentlemen, in the pioneer days of educating the deaf in the United States the only school for preparation of teachers was the American Asylum at Hartford. Persons desiring to enter this work took the stage coach or rode on horseback to this famous school and sat at the feet of Thomas Hopkins Gallaudet and Laurens Clerc for a period of one year. They were then sent out on the mission of educating the deaf in the various States.

In looking through the American Annals of the Deaf, we find no reference to the training of teachers until after the Civil War. A long period of 50 years had elapsed since the founding of the first school. There may have been articles written and read in conventions prior to this time, but no record of the same was preserved. But when the beginning was once made article after article appeared from the pens of the ablest writers.

A meeting of teachers to-day would not be considered complete if some one did not read a paper on "Training and preparation of teachers." We must, therefore, conclude that the educators of the deaf look upon training as of the greatest importance. So do educators in all lines consider training.

High standards have been set up for teachers in the hearing schools and it is becoming more and more difficult to enter the profession. But when one is able to meet the requirements, he or she ought to be well prepared to do a superior work. Whether this is always the case or not we shall speak of later.

The advent of oral teaching has brought into the deaf schools a greater demand for the training of teachers because it is impossible to proceed with speech teaching without the teachers being thoroughly grounded in the technic of the slow and tedious processes. As in all other lines of education the deaf schools have kept pace at least with the hearing schools in the training of teachers and in many instances have far outstripped them.

The pages of the American Annals of the Deaf show that able educators have discussed this subject in some form or other. We shall give both the author and the volume in which his article appears. Those interested would be greatly benefited by reading these articles. They cover almost every phase of the work and we do not feel it necessary to repeat. Time is too valuable for it. We shall feel that we have done our duty in this respect by calling attention to these articles and then pass to the discussion of a great principle which underlies success in every line of work, and therefore success in teaching the deaf.

	Volume.		Volume.
De l'Epee.....	13	Gordon.....	37
Hubbard.....	17	Talbot.....	40
Baker.....	18	E. P. Clark.....	45
Lathan.....	15	E. S. Tillinghast.....	49
Gillett.....	15	Jones.....	53
Peet.....	18	Crouter.....	51
Anonymous.....	23	Booth.....	51
Gallaudet.....	24, 37	Mrs. Anderson.....	53
T. H. Gallaudet.....	37	E. W. Walker.....	58
Peet.....	37	Discussions.....	53, 56, 58
Jenkins.....	33	Hall.....	53
J. L. Smith.....	33	The Clarke School.....	51

There may be many other able articles bearing on this subject lying in wait for the ambitious and interested teachers to read. We doubt, however, that very many will look up the articles already referred to and therefore do not feel the necessity of adding to the list. It may not be out of place, however, to point to the Annals as a great storehouse of information on all subjects and to pay our tribute of praise and thanks to Dr. E. A. Fay, who preserved it, classified and indexed it, so as to make it easily accessible. With this reference we shall pass to the discussion of the general principle referred to, which, of course, includes "training and preparation" of a good kind, of the quality that may have its beginning in a small way but which grows with experience and practice.

Training of the very best kind will avail but little unless it is supported by an interested soul. Many persons go away to take training simply because they have an opportunity and do not know just what else to do. They believe they would like to teach the deaf, and so go to the expense of preparing for it. At least they would rather teach the deaf than do nothing or a harder work. They sit under the instructions of the training teachers, do the observation work indifferently, and perform the practice work perfunctorily. They do not feel the thrill of interest and enthusiasm, a downright longing to bring the pupils to an understanding of new things nor do they get any joy out of what they attempt. And when their training is completed and they enter upon their work in some school, there are no particular evidences in the results of the teaching that they have had the very best training our country affords. In fact, very little differences are observed between their class and the class of others who have never seen a training school. And it is not an uncommon thing to see the latter far outstrip the former. But this does not mean that training is a useless thing. It means only that the wrong person was trained and that the mind only was trained without reaching the heart or the soul. Had the latter teacher been sent away from home at a considerable expense, her work already good, would have been multiplied many fold.

The principle, therefore, underlying all successful endeavor is interest, enthusiasm, enterprise, industry, and love. One must go forth not from without but from within. He must follow rather than lead his soul. "For where the heart is there will the mind be also."

If any one of these qualities of the character is absent, no amount of training will produce an excellent teacher. It is said that enthusiasm begets work and work produces. But I say enthusiasm is work. It in a way embodies the other qualities. Because who can be enthusiastic without love and industry?

It is no sign of enthusiasm that one is teaching the deaf, no matter how long he may have been at it. Have you not seen many teachers spiritually dead? And have you not felt it a sin to keep them in charge of the education of children? Experience may mean much, good or bad. It depends on the spirit of the individual. In Doctor Hall's address as president he repeated what has been said at each convention since I entered the work 28 years ago—that the appointing power makes a mistake by going out of the profession for a superintendent; that all executive officers, even those who do well, would do better if they had

been teachers of the deaf. I do not believe it. An executive officer should be free from prejudices and traditions. He should be a free lance to champion the right as he sees it and he should be able to see the right. Everyone knows that schools of all kinds build a web of tradition on the good works of those gone before. Those who long work in the school unconsciously become enmeshed and can not always separate themselves from old forms, customs, and systems.

They may not work elsewhere. The environment is different. New thought, new plans, new results are demanded.

The man with a great soul filled with a love of work and with an unbounded interest can do better. He must, of course, be intelligent and industrious. He must be a real man and unafraid. He must not think of self. Only his work is worth while.

While I have heard for many years from the president's chair my appointment as superintendent condemned, although accompanied by nice words about me personally, I do not care. It has never worried me. I have not even held it against those who have declared it. I do not so hold it now. I greatly respect President Hall.

But I sometimes wonder what such superintendents as Mr. Harris, of Georgia, Doctor Coughlin, of Ontario, Mr. Pittinger, of Indiana, Mr. McManaway, of Virginia, Mr. Smith, of Illinois, Mr. Gilbert, of Michigan, Mrs. Poore, of Tennessee, Mr. Bray, of Wisconsin, Mr. Huckaby, of Louisiana, Mr. Welty, of South Dakota, and many others may feel about it.

What a superintendent's experiences were before he became a superintendent does not matter. It is how he reacts to experiences after he assumes the duties that is important.

Too much inbreeding is not good. Some new blood is always necessary. Our profession is too narrow when it assumes to say that no one shall be brought in from the outside. It should welcome new ideas, unfettered minds, and helpful hands.

I can say that, friends, having had your support and kindness for the past 28 years, I now am a part of you. Yet, as I said, the profession is too narrow when it puts up the bars and says, "No one can enter here except those that are already in."

There is another reference in Doctor Hall's address that I believe is not borne out, at least entirely, by the facts. It was his reference to the manual classes being much larger than the oral and taught by poor teachers. In the Ohio school there is but little difference in the average of the manual and oral classes, and the teachers of the manual classes are mostly graduates of Gallaudet College, and are good teachers.

The last appointment is a graduate of the Ohio State University, a very bright woman, who lost her hearing while teaching in the public schools.

But a teacher of an oral class must teach all that a manual teacher does, and teach articulation and lip reading besides. For this reason the oral classes may justly be smaller.

If the graduates of Gallaudet College are not well qualified to teach a manual class, I would not know where to go for qualified teachers.

I have referred to Doctor Hall's address very reluctantly, but because I feel it my duty to do so. The time has come when we must take a broader view of our work, walking humbly and dealing justly with all classes.

Now, as to enthusiasm and the part it plays in the battle of life and therefore in teaching.

I happen to know a young man in the fire and livestock insurance. He loves his work. He goes out and gets the business. No difference how small the policy his pleasure comes in getting it. He will make the trip regardless. Everything else must give way to it. He is posted on the last detail, not only of his own company, but of all other companies. He feels he is always rendering a service to the one insured. He is successful and his business is constantly expanding. This is because of his enthusiasm. He omits nothing. He serves and does it with such a sweet good will that his patrons all work for him.

This principle could be applied to all great businesses such as the United States Steel, the Ford automobile, the advertising of the Camel cigarettes, the successful management of railroads, etc. But we have chosen a simple illustration because of the apparent insignificance of fire and livestock insurance and the great success this young man is making out of it.

Another agent came to the office to beg for a small piece of business. He was in hard luck, people were fighting him, some were conspiring against him. He

was not succeeding very well. He needed the business in order to get his commission with which to buy bread and butter for himself and family. He thinks in terms of self. The other young man thinks in terms of service to the insured. The latter takes care of his business and his business takes care of him, while the former must beg for what business he gets and starve while he begs.

One may pass through the grades in any school for the deaf and he will see teachers representing these two classes of insurance agents. Some school-rooms are full of interest. The pupils are clamoring for information. They are anxious to express themselves in either speech or language, or both. They are on tiptoe continuously in doing their best. Their progress is rapid and certain. The children are happy and their faces show it. Already the teacher has impressed herself upon the visitor. She is wide awake, industrious. She is pleased with what her pupils are doing. She does not apologize or explain, but she rejoices. She does not say so in words, but you see it in her face. If she is a teacher of speech she has likely had excellent training and has been able to appropriate it all for the benefit of her pupils.

She is not teaching for herself, but for her school. She sees the multitude of possibilities and responds vigorously to all of them. When her day's work is over she goes home with a light and happy heart, although somewhat fatigued. But she is anxious to return on the next day. She meets her pupils with enthusiasm and they greet her with gladness. It is a beautiful sight. Should she fall sick there is grief in the class. And when she returns to take up their work there is great rejoicing.

The other teacher just wants to earn something. She is lackadaisical, cold, indifferent, conducts the several recitations the best she can, but is glad when the day is over and regrets it when she must come back. If she could only earn the money without going through the fatigue and annoyance, without going through the daily routine, how happy she would be. There is but little progress in the school and those responsible for her are always hoping that she will find something to do elsewhere which will bring her more happiness.

Between these two great extremes lies a broad field of educating the deaf. No teacher would want to be classed with the latter. And not a large per cent can ever attain the high position of the former.

Our schools on the whole must be taught by the average. For these, training is a great help; in fact a necessity. Ample provision should, therefore, be made for the training.

Our facilities at present are far too meager. Only a few schools offer an opportunity; and these to only a few candidates. Many more of our residential schools should have training departments. If it should involve additional expense no matter. But in fact a training department in connection with a school can be so managed as not to make an additional expense. The normal students can do enough substitute teaching and perform other duties to compensate the school for giving the training.

Speaking from our own experience the hardest problem has been to select suitable candidates. Some who appear promising turn out poorly. They lack the quality of heart and mind. Others have acquired in passing through the high school or normal schools the habit of indifference. They lack application. They prefer "just to get by." They do not throw their souls into the work.

This brings me to raise the query as to whether the standard of education of our hearing schools, normal schools, and colleges is sufficient. Whether or not the substitution of the credit system, which is a time system, is as valuable in securing results as the old system of grades. Anybody can do time. But it takes intellect and application to accomplish work.

From various sources of information one is led to believe that the quality of education that our young people have is far below what it was many years ago.

I know, as we grow older, we magnify the past and minimize the present, but I think I am capable of putting away any such feeling and of judging people when I meet them face to face and work with them. I have the conviction that the public schools are not turning out the quality of mind and heart that they did many years ago when pupils had to make grades rather than to do time.

The young folks may have covered more subjects and skimmed over a wider field of investigation but they failed to investigate. Time was the important thing because it meant credit, while acquisition of knowledge must give way to the social and athletic activities. Almost any professor in college or super-

intendent of a high school will tell you that the quality of work is not what it ought to be, but they are unable to combat it. It has gotten beyond them. They likewise are marking time. They regret it, but they must endure it.

The old philosophy "beware of the man of one book" had much in it. Our graduates from normal schools and colleges would be better off if they knew a few things well than not to know many things which they ought to know. But the worst part of it is the acquisition of a habit of doing as little as possible.

So when one starts out to select candidates for training to teach the deaf, he is liable to find behind bright eyes a habit he does not want. But there are many fine young women who can be drawn into the work and who have never been to a normal school or college. Some of our best teachers are of that kind. They are found in every community. If their training were made easily accessible and inexpensive, they would gladly take it and become teachers of the deaf.

And what a great work they would be coming into! What a fine field for the romping of a soul! What opportunities it offers for doing good! And how much pleasure it offers to those who are qualified by nature and training to do the work! It far surpasses teaching in the hearing schools. And teaching anywhere is the very best work women can do. Therefore, teaching the deaf is the cream of the best work in the world. There ought to be no trouble in inducing bright young women, unspoiled, to enter it.

Mr. GRUVER. Is Miss Van Dusen in the audience? [No response.] I do not think she is here. We shall have an opportunity to discuss Mr. Jones's paper a little later. We will continue with the program, and at the end of the next paper have the discussion.

Miss Gaarder, principal of the Kendall School, will now present her paper on "Normal training for the college graduate."

A NORMAL COURSE FOR THE COLLEGE GRADUATE.

By Miss IDA GAARDER, Principal of the Kendall School.

Every teacher's training has of necessity two sides, the academic and the professional. The teacher must know "something to teach and how to teach it." This holds true for the high-school graduate as well as for the one who holds a bachelor's degree, but the kind of professional training offered to the college graduate will differ substantially from that offered to the student whose academic training has been less complete. We have a right to expect from the college graduate not only a wide field of knowledge and experience, but a broad outlook upon life, together with the ability to see beyond isolated facts into their deeper significance "in the meaning of the world in which we live." Upon such an academic foundation we should be able to build a normal course, intensive, purposeful, that would give the student such a body of working knowledge and right professional attitudes as to fit him to take charge of any class of deaf children as a teacher and leader. It is to a discussion of such a course, covering nine months of work after college graduation, and based upon the course now offered at the Columbia Institution for the Deaf, that the remainder of this paper will be devoted.

First of all, the student who enters the normal class needs background; he must know something of the earliest planned education of which we have record; and see, through his study of the methods of the succeeding centuries, in the schools of to-day a resultant but still changing system, the outgrowth of an evolution brought about by development in civilization themselves. He must see that the school has been in every civilization one of the great enterprises of the social scheme, and for that reason that it can never be fixed as to method. A good course in the history of education is an absolute requisite for the acquiring of such ideas and attitudes. Such a course naturally stresses the history of education of the deaf, and is so directed as not to isolate but to include in the whole educational system this one of the many special fields of teaching.

A teacher of deaf children can not know too much about deafness or deaf people. A course in statistical study is therefore given either as a part of the educational history work or separately, which includes studies of causes of deafness, classification of the deaf, the deaf in industry, their legal status, and many other topics of interest and importance to those whose working time is to be spent with deaf girls and boys. Without well-defined ideas relating to these subjects, an otherwise good teacher may fail in his larger task of preparing his pupils to fit into their environment after leaving school.

There are some special subjects that are required for teachers of the deaf, academic in character, but of necessity given in the normal course because they are not given elsewhere. The first of these is the teaching of speech. To a body such as this it is not necessary to go into detail regarding this work. Besides the teaching of the formation and development of the elementary English sounds, the course includes as much work as time permits on aural training, the correction of speech defects, voice placing, phrasing, inflection, and all means for getting natural speech, as well as lectures and observation in tone and rhythm work. The teaching of speech-reading is given also, with some time spent on lip-reading for adults. At first glance this may seem unnecessary, but when it is remembered that every year advanced pupils who have just lost their hearing enter schools for the deaf, such work takes on great significance, and is well worth while in view of the time and energy conserved for teacher and pupils alike.

Another subject which we may well term as special is a review in 12 lessons of the fundamentals of English grammar and rhetoric. College graduates with few exceptions state that by the end of their senior year they have forgotten the greater part of what they once knew of grammar. To teach English well, they must know well the primary principles of its construction and use, and for that reason the course is of great value, but because the normal students are college graduates with English courses not far behind them, 12 lessons well given are enough to accomplish the end sought.

The manual alphabet and the language of signs is included under this head of special subjects. The manual alphabet is used very largely in one school in this country and somewhat in many of the combined schools. As for the sign language, while the teacher himself will not use it in the schoolroom, he can more easily correct mistakes that are the result of literal translations of sign idioms if he understands signs, just as he could better correct the English mistakes of a Frenchman if he understood French. The second reason why a knowledge of the sign language is of use to a teacher of the deaf is that it is in general use among the adult deaf themselves and a teacher needs and wants to know the older deaf and to be able to meet them on a common ground of language. To know the child well necessitates knowing the adult, just as to know and understand the adult necessitates comprehending the child, his thoughts and motives.

After the history of education and the special subjects, the third course given to the normal class is one in psychology and especially psychology as related to the deaf. How does the absence of one sense affect the child's nervous system? Does the deaf child make more use of other senses—e. g., touch—because of the lack of hearing? May his response emotionally to a given stimulus be different from that of the normal child? These and scores of other questions will present themselves for consideration and study. Some discussion of intelligence tests and measurements, both of those worked out for hearing children and adaptable for use with the deaf, and those already given to deaf children, are added.

Observation of classroom work in the Kendall School occupies a period a day for a term. The students write and hand in notes to the teacher for correction and discussion. A term may not seem long enough for this work, but we learn from doing rather than from seeing, and after the first term the student will learn more from his own practice teaching than from any amount of watching another teacher, no matter how skilled that teacher may be.

A course in school management is the fifth subject required. First of all the student recognizes through this study the factors involved in education, the child, his home, environment, heredity, etc. Then he learns what the education is, that it is five sided, meant to develop the child so he may have knowledge, health, vocational training, right moral habits and ideals, and a cultivated æsthetic sense giving him the ability to get pleasure and happiness from things of beauty. The course also embraces a variety of other exceedingly valuable topics. One is the subject of health. The teacher must know how best to establish and maintain a healthful atmosphere in his schoolroom, how to develop right health habits in his pupils, what to do in cases of minor injuries, and how to recognize the symptoms of the common children's diseases. The question of discipline is another taken up. What is discipline? What are the conditions necessary to good order? How is the matter complicated by deafness? Sometimes cases of discipline will merit punishment. The teacher must know that the purpose of all just punishment is not to take revenge on the wrongdoer, but to reestablish right relationships. In addition he must know what constitutes effective punishment and under what conditions and by whom it had best be

administered. These matters the normal students work on and consider carefully. Incentives to better work and behavior, and various methods of teaching are considered also. It is not enough for a teacher to get his pupils to pass their grades. If they have not been deeply interested, if they have not enthusiastically contributed largely themselves, the work has been a failure in spite of passing marks. Children too, learn best by doing. We give the little children action work and handwork, but as they grow older and begin to use textbooks, there is a tendency to swing to book study entirely. In so doing, the teacher loses the wonderful help he could have in the child's constructive instinct. The project method, used to a great extent in public schools now, is an especially useful one in this connection, and the members of the normal class study it and adapt it to deaf children, understanding that it is a help but not a panacea. Grading and promoting are other topics included in the course, as well as teaching to study, lesson assignments, and the manner of conducting the recitation. Then the course of study is taken up, each subject being studied from the special viewpoint of its presentation to the deaf child. School libraries, teaching children how to care for books, and how to use reference books, are topics that call for special work and consideration in this connection. The language course through the full 12 years is gone over in detail and an outline given to each student. An outline, year by year, of the entire course of study covering 12 years' work is given to the members of the class also. Finally, the school management course includes study of the teacher, his personality, professional attitudes and relationships, further education, health, and recreation. Certain things are expected of the teacher in the way of dress, behavior, manners, etc., that can not well be overlooked.

Then the normal student is impressed with the fact that if he is to be a success at all he must have respect for education itself, for higher standards, for the profession of teaching, for other teachers and other schools, and for himself. He must be willing to take orders from his superior officers and carry them out as far as he can, but he will not be a bootlicker. He must develop a sense of humor, if he does not already have one. Finally, he will learn how and why to keep himself mentally and physically fit by travel, study, general and professional reading, and by healthful recreation, and if possible by an avocation through which and by which he can get a complete change and consequently a rest from daily routine.

All the study the normal student has done so far, all the ideas and theories he has formed through the course as outlined, are now brought together and applied definitely in practice teaching under the supervision of experienced teachers. The equivalent in time of two periods a day for six months is given over to this part of the course.

The last and final work of the members of the normal class is the writing of a graduate thesis of not less than 2,000 words on some subject relating to the teaching of the deaf, and upon which the student has spent much time in research. This year at the Columbia Institution for the Deaf one of the normal fellows wrote a thesis on the subject of "The moral training of deaf children," and another on "Industrial training in schools for the deaf." The third thesis was entitled "Tone and rhythm work in schools for the deaf," and the fourth "A comparative study of English and Sanscrit from the viewpoint of teaching the deaf." This list gives an idea of the variety of topics that may suggest themselves to normal classes and that may be profitably studied and written upon by them.

The normal course as briefly outlined in this paper then includes history of education and statistical study, special subjects necessary to the teaching of the deaf, psychology, observation of class room work, school management, practice teaching, and a thesis. In all the work there is necessarily much reading and reporting on special topics. Throughout the year emphasis is laid on the importance of having a clear and definite aim in all teaching. The student sees that the broad aim of all education must be kept in mind and all school work called to account regularly to test its conformation to that aim. Finally, it is hoped that the student learns to think of the individual child rather than of the group, to realize that of equal importance with the excellent and thorough teaching of language, or arithmetic, or geography, it is his business to teach the child, to so bring him out that when he is through school he may have not only knowledge but also such mental development and control as will cause him to react sanely, sensibly, and fairly under all circumstances and conditions.

Mr. GRUVER. Dr. Harris Taylor will discuss Miss Gaarder's paper.

Dr. HARRIS TAYLOR, of the Institute for Improved Instruction. Mr. Chairman, ladies, and gentlemen, I regret very much that in a few features at least I shall have to take issue with Miss Gaarder.

First, I would say this: I think that the course of study that is the best of all, is the best that applies to the individual, and I believe I had the best possible for me. I had two years of neglect by John W. Blattner, which was the best training that anybody ever had. [Laughter and applause.] I went to the Texas institution sight unseen, and when I got there, in the beautiful and poetic language of a later time, Mr. Blattner and others decided that they had "picked a lemon in the garden of love" [laughter], as I learned later—about a year later—and the only thing to do was to freeze that lemon out. Therefore I received a normal course which occupied fully 20 minutes, Mr. Blattner giving me a book in which was written down what I was expected to cover in a year; and it took him 20 minutes to explain why some of it was due to the fact that I could not read one or two of the words. If I had been told how to do anything I never would have done it any better than those who told me. I didn't know how to teach the deaf; I had no instruction and I was compelled to use my brains to hold my job. And I made all the mistakes there were. I defy any of you to make any mistake that I didn't make [laughter], and I defy any of you to have to work out more ideas than I did. Some of the ideas that I worked out had been invented by persons or thought out by persons a hundred years before me. I didn't know it. [Laughter.] I learned afterwards that there was a book or a periodical that bore on work with the deaf called *The Annals*. I didn't know it—splendid stuff in it. I worked out things there that I found out had been worked out by people who simply seemed to look forward and date back to their own time and get my ideas a hundred years ahead of me. But it was good practice for me. It made me think.

Then another blessing I had was that I didn't know how the others did it. I was too proud to ask anyone; but occasionally I would gather a little information in a surreptitious manner. I would go along a long gallery, they called it there, and I would look in the other schoolrooms—nobody helped me—and I peeped in to see what was on the blackboard. I wouldn't dare go in and ask one of the teachers to tell me how to do anything. No. Then I would go into the room at night and see what was left on the board. [Laughter.]

I couldn't use the sign language, so I had to use pictures. I tried to draw them, but when I got a jack rabbit and a mule mixed I had to give up drawing. Then I couldn't always find the picture that I wanted and I had to bring the things themselves into the schoolroom. One time the superintendent tried to stop me from bringing a washpot and a fence rail into my schoolroom, and Mr. Blattner there came to the rescue. He said: "Its all right. Let him have his washpot. He'll never be happy till he gets it." [Laughter.]

Now, that was the kind of training that I had. I asked afterwards why it was and I was told. They didn't want me, and they were going to make it so hard for me that they would get rid of me, and if by any chance I could survive, there would surely be something in me. That was my training, and if I could go over the whole thing again I wouldn't have training of any different nature.

Then when I got ready for it, I found out that those who had tried me and tested me were eager to come to my assistance.

Now, that is one extreme. There is another extreme, as outlined so ably by Miss Gaarder. But I will say this, it seems to me that she has undertaken more than can be effectively carried out—there is great danger at least that it is not done right.

She says it is necessary to have background, and notice what a tremendous background she gave them. It reminds me of the background that Washington Irving talks about, of the man who wanted to jump over a mountain. He ran 2 miles to get a start and then he was so tired that he had to stop and he couldn't make the jump at all. Now there is great danger of just such background as that. Background is necessary, but you can't understand the present by going back to Adam and working up till to-day. You have got to start in to-day and work backward. Learn what could have happened. Learn history from current events. You can't understand much about what has been done before in the history of the deaf, the education of the deaf, until you understand something of what is being done in their education to-day. Begin with to-day. Think forward. Read backward. Study backward. It is necessary that way. And how much background you can get I don't know.

I do know this, that I took a young man in this year who had had no training, and he was not taking the work in the way that we desired. He was not giving enough attention to the details of his daily labor; and Miss Buell—when there is anything unpleasant to do I get Miss Buell or Miss Hancock to do it, and when it is pleasant I do it myself—she went at the young man and told him about that, and he said, "I am acquiring background." What is he going to do with his background? Background is not a picture; the picture is here; background is something that enhances the picture, but for heaven's sake get the picture first. What is background? Suppose you have acquired background for your house and you haven't got any house, what difference does it make to you? You can do just as well with one kind of background as another until you have got something to put it to. Well, we finally convinced him that he ought to get something first and then work in a little background later.

The idea is correct, but there is great danger of having so much preparation, so much of a general nature—too much of a general nature—so much so that you can't go in and develop certain fundamental things in the schoolroom. After all, with the teacher class next year—and that should be the first problem—you should have just as much general immediately as is necessary to illustrate the particular that you are after, and then working on that, make it necessary to acquire background in proportion as you make the picture. And each time from day to day they can understand better the background that is needed and what you are wanting there.

Then, again, I think that possibly there is too much of the general in the way of the statistical study of the deaf, deafness, and the deaf in all the various phases. This can go too far. It is highly desirable that these conditions should be known, but it is more desirable that immediately you who understand these children before you, and having understood them to some extent, encourage a study of conditions that will serve as background and general information that will serve as background.

It is very difficult to make a clear-cut dividing line in my discussion between the papers of Mr. Jones and Miss Gaarder. They have a good deal in common, and if I should happen to say anything that should apply to Miss Gaarder and it happens to apply to Doctor Jones, he will not feel hurt. There are one or two points here that are worth considering. One is that no great original idea in teaching, in all human probability, will originate with the teacher. You and I are persons who can not see the town for the houses. You and I are the persons who must perfect things, work out to the best possible advantage the ideas that we have; but the greater vision, the broad, big ideas, those that are going to revolutionize teaching, those that are going to turn our system upside down, will in all probability come from an outside source, from some person who sees it as a whole and makes 150 foolish suggestions which have been tried out and are impossible, but in addition will give us one bright idea which will revolutionize teaching.

Now, just giving that a more local application, you get an idea of why our friend Jones has usually been put in charge of the normal section. He brought into our work a mind trained to think, and he was not cluttered up with traditions of a hundred years back. He had clearness of vision, which made him enrich the profession instead of coming in, we may say, as a political appointee. [Applause.]

There is another thing to bear in mind. When all is said and done, teaching ability comes from ability to teach. No amount of education or lack of it affects that real fundamental ability to teach. One of the best teachers I have ever known was a young woman who was trained at Lexington Avenue, a young woman of exceedingly limited vision, of very meager education. She never could teach very far, but what she knew she could teach as successfully as anybody that I know. And you will find that is very often the case. Sometimes you will find a poorly educated person who is a splendid teacher. She may not know very much, but she has a wonderful faculty of imparting the knowledge that she has and of inciting a desire for learning in the children that she is talking to. Now, bear that in mind. The thing to do is to give to that person of ability the opportunity to develop that ability to teach. Training very often irons out every particle of originality in a person. In many instances it does. The average person would rather spend 3 hours following routine work than to put in 30 minutes of intensive effort trying to work out something original.

Now, how can we plan this training that will enable the teacher to go in and handle the class, accept what is best as it exists and still not take out of that person every bit of individuality. If that person had to flounder through it without training, the children would suffer, it is very true, but that teacher would work out something; if it came to the worst she would work herself out and you would at least find out whether she can teach or not. Then with a certain amount of training and a certain amount of routine way of doing a thing, you know exactly how they are going to do it. I can look in some books that have been written by normal students back in the nineties and tell you what some others are going to do next week. There is a standardized way of doing certain things in many cases. It has been standardized and you dare not rise above it. Your standardization keeps you from falling very far below it.

In another way the training is a play for safety, but there is a great danger that it will prevent the individuality, the development of individuality that is highly desirable. Some one will point out men like Doctor Hall and others here that have come through training. Well, I don't think the training ever hurt them. It was in them. The training helped them but they didn't get enough to iron out their individuality.

So let us put it this way: Training of teachers is necessary. It is necessary that they should be taught that such and such ways of doing things are the best that are now known to us. But we should give a reason for that. Suppose you should go into a school room and say to the teacher, "Why did you do that?" And she would say, "Miss Yale did that," or "So and so did that"—imagine what Miss Yale would say if she could hear that. Why did she do it? She did it because she had worked it out from ideas and conditions as the best that was known.

So let us use what is best; work to the best advantage that we can, but always leave the hope that there is something better possible, and give a chance for originality and individuality and do all we can to encourage it, within the limitations at our command.

I quite agree with Doctor Jones that the sources of training in this country are very inadequate. The American association contributes \$1,500 a year toward one training class. Gallaudet College—how many can you carry there, Doctor Hall?

Doctor HALL. About six. It costs us about \$500 apiece—at least that.

Doctor TAYLOR. It costs Lexington Avenue School, the money that must be met from private sources, \$1,000 a year to conduct its class, which is from four to five.

Then there are other schools that have small training classes, and I venture the assertion—how many do you carry ordinarily, Miss Connery?

Miss CONNERY. We carry 15.

Doctor TAYLOR. Well, that is very acceptable. You didn't have any trouble finding them—finding places for them?

Miss CONNERY. No.

Doctor TAYLOR. Mr. Goodwin, how many have you?

Mr. GOODWIN. Five.

Doctor TAYLOR. And you are wanting some teachers yourself to-day.

Mr. GOODWIN. If we can find the right sort.

Mr. JONES. I have six.

Doctor TAYLOR. What other places?

Doctor DOBYNS. Three in Arkansas.

Doctor TAYLOR. And yet there is a dearth of teachers. Now, how can this training go on more effectively?

If there is anything in what I have said that would seem to imply that there is any serious lack of appreciation of what Miss Gaarder said, I have been misunderstood.

I thank you.

Mr. GRUVER. We will give Mr. Harris a few minutes.

Mr. J. C. HARRIS, of the Georgia school. Because of my lack of experience in the schools for the deaf I would like to submit to the convention the plan which, with the assistance of my exceedingly competent assistant principal, we have worked out in the Georgia

school, and I would like to know in what way it fails to meet the needs of the profession.

We have engaged an assistant to our supervising teacher, the assistant principal, and we have engaged five graduates of the normal type from the colleges of Alabama and Georgia, teachers who have prepared themselves, who have passed through all of these courses for the teacher's service in the hearing schools, and now we are asking them to come to our school as cadet teachers on salary, the two supervising teachers to train them.

We would like to know if that would not work in the course of a year or two to bring in good, successful teachers.

MR. GRUVER. At the close of this session we shall give you an opportunity, if there is any time left, for discussion. We must hasten on with the papers, so that each member on the program will get his or her opportunity to present the subject.

We shall be very glad now to have the paper by Mrs. Moore on "Teacher training" in the Florida school.

TEACHER TRAINING.

By Mrs. SIDNEY M. MOORE, Florida School.

I do not feel that I can in any sense do justice to the subject assigned me; but the upbuilding of our deaf children is a matter of very deep interest to me, and in thinking of it through the years of my experience with them, certain points have come to stand out and to call for new sort of emphasis. In stating them, I may add, I shall digress considerably from the subject of training.

It is necessary to stress the need for bettering conditions in the profession of teaching the deaf. Many teachers have passed through the class-rooms of our schools in recent years and in our thought of them they automatically fall into two groups. In the first are the competent, conscientious teachers—"Christians and gentlewomen" of whom we all unite in saying "God bless them. May their tribe increase." In the other group are classed a number of types—all more or less unfit. Probably most of you have met them, for they form quite a considerable proportion of the teaching force to-day. They have come from many of your schools to us, and from ours to you; these young women who, sometimes from sheer inability to appreciate the spiritual side of their high calling, sometimes from lack of proper preparation, sometimes merely from careless drifting, are making the schools fields of self exploitation instead of great humanitarian and missionary enterprises.

But why should the teaching of the deaf—surely a serious enough and an arduous enough profession—draw to itself so many misfits? The outstanding reason, as I see it, is that being without professional unity it yet offers a certain professional prestige, together with protected conditions, money, and opportunity for travel and adventure. Forty years ago the public-school work in the State of Florida was in the same chaotic condition. All that was required of the applicant for a position as teacher was the indorsement of a member of the school board; a body not usually chosen for its educational fitness.

As a result Florida became a refuge for incompetents, and it was only when a system of uniform requirements becoming year by year more rigid was inaugurated that the upward trend began. But that was a work undertaken by the State for its large group of schools. In the matter of teaching the deaf no such authority is available because the work is highly specialized and centers frequently in only one school to the State. The double problem we face, of attracting and holding the fit and of reducing the unfit to the minimum, is one that we ourselves must solve, and the responsibility for its solution is so distributed that without coordinated action of the training schools, the principals of schools, and the teachers, it looks very hopeless.

To sketch briefly, and of necessity incompletely, the possible contribution of each of these factors:

We need from the training schools—

(1) Careful selection of normal students and rather more drastic elimination of the unfit during the process of training. The girl who is notably lacking in

moral standards or in self-control, the one who is essentially frivolous, the one who has neither language sense nor common sense, the one whose perception for speech quality is nil, the one who is without the personality necessary to success in a schoolroom, can not be detected by preliminary examinations but might well be eliminated in training before she fares forth to work harm.

(2) We need from the training schools also a judicious mixture of theory, observation, and practice in the courses given. It seems a grave injustice to any would-be teacher to place her in immediate charge of one of the regular classes of the school, even under supervision, and it is an outrage on the pupils who constitute the class. At the same time it is most unfortunate to omit from the course abundant practice teaching, well supervised, but from my experience with trained teachers, I think the greatest proportion of failure among them comes from lack of proper observation or from unsystematized observation during training. The person who can apply abstractions to a group of wriggling, mischievous deaf children, without actually seeing the thing done, is a genius. Such carefully systematized observation of expert teachers should be given that the normal student will have a clear picture, recorded in well-censored notes, of the process of presenting, developing, and completing the work of definite grades or subjects; such observation as will enable her to proceed from the first day of the term to the last intelligently.

(3) We need from the training schools such results in their own schoolrooms and in the records of their graduates as shall build a high faith in the people they are training.

(4) We need such uniformity in the essentials of training that the teacher from Wisconsin can do acceptable work in Virginia, or vice versa.

(5) We need something—possibly it is a longer course—that shall turn out teachers who have more completely digested their training. It is noticeable that the teacher trained for public-school teaching brings to our work a vigor, a clarity, and a comprehension of child psychology rarely found in the one trained for our work alone.

But the efforts of the training schools avail little unless the people who employ teachers do their part. We need from the schools—

(1) An insistent demand for a high-grade product. When the woman who has taken three months' training can compete successfully with the one who has spent due time, money, and effort in preparation; worse yet, when the woman who has merely observed school work for a short time can step into a position as a trained teacher; when the high-school girl ranks with the college graduate before the leveling process of applying for a position; there is not sufficient check upon the unfit to support the training schools.

(2) We need—and it is a grave need—conditions in our schools which shall make successful teaching possible. I am well aware that this point opens the door to controversy but the fact remains that Mr. John Dutton Wright hit the nail squarely upon the head when he advocated the dual system. If there are deaf children who can be taught by no other than the manual method, then by all means let them be taught so. But there is no convenient emulsion that will combine those mutually insoluble elements, manualism, and oralism. Oral work done in a manual atmosphere is not oral at all in any helpful sense. And from the teacher's standpoint, to train, to work, to keep one's class in mind day and night, to achieve the conquest of a difficult piece of language or speech, and then to see it literally broken down and destroyed outside the schoolrooms; to have the girls and boys as they grow up assume a contemptuous attitude toward the oral work and a resentful one toward the oral teachers and look to the manual department as the goal of their ambition; to have officers of the school actually invade the oral class rooms with signs; to have little oral children officially taught to sign and spell and then have to fight the language tangles that result from sign thinking and the continual interchange of communication by signs; to have the pull of one set of opinions against another seeping into the children's consciousness constantly; in short to know that your work is a farce conducted for the benefit of heaven knows whom, but certainly not of the children—that does not attract and assuredly does not hold the competent. The oral schools and the city day schools are absorbing the best material steadily and my inquiries lead me to believe that location and salary are not the main cause, but rather the fact that such schools reward effort with the joy of achievement.

(3) We need such recognition of preparation, self-improvement, length of service, and dignity of position as shall make them goals to be striven for.

(4) We must have pleasant living conditions. It is not uncommon to hear teachers say, "I loved my work at ———, but I could not stay there on account of the food," and they go on to explain that childish as that sounds it is literally

true—they could not preserve health on the all-starch or all-something-else diet provided, nor could they afford to spend much in making up the deficiencies in an ill-balanced ration. The alternative was to seek another dining room. It is not luxuries that are needed, but modern dietetic knowledge, in many school kitchens. Balanced diet, adequate heat and comfortable rooms spell among teachers as among soldiers, good morale.

(5) There must be honesty between superintendents in recommending teachers. A credential chiefly remarkable for what it leaves unsaid serves to prolong the reign of the unfit.

It is Dr. Frank Crane, I believe, who writes to the effect that all of life is done up in packages and placed upon the shelves. We reach out and take what we choose, and, always, we pay for it. So the schools must pay, not merely in salaries, but in conditions and equipment if they are to receive the best in the way of teachers and teaching.

The teachers, who are the greatest factor in the problem, numerically, are also the most helpless. They control neither their preparation nor their working conditions. Like the Light Brigade, "Theirs not to question why, theirs but to do and die." Many a young woman enters upon a life work to which she is not adapted because no one is kind enough to tell her so. Others drift into the habits of the unfit because these things are tolerated in so large a number that they become a fashion. Many of those who train teachers are exceptionally gifted. The teachers are the channels by which the gifts reach the children. But the teachers are neither a powerful nor a stable body.

I have no doubt that wiser heads than mine will be able to suggest many workable plans for so combining the three elements of our problem—the training schools, the schools and the teachers—that our deaf children may not be ground between the upper and the nether millstones as at present. One suggestion would be to follow in part the very successful plan pursued by the national organization of nurses, which has welded a large and irresponsible body into a most effective one by a process of coordination that unifies the various elements concerned and maintains a sufficient check upon their operation.

Only through some such organized effort, I think, may we hope to see a uniformly high standard develop in our American schools for the deaf and among our teachers.

MR. GRUVER. A man has come to us from across the sea. He is very welcome. He has had great experience in the training of teachers of the deaf, and has a message for us, I know, that will contain much that is different in character, possibly, from what we are doing in this country, and give us another insight into the training of teachers.

It is my very great privilege and pleasure to present to the meeting this morning Mr. Haycock, of England, who will talk to you on the training of teachers in England. Mr. Haycock is chairman of the National College of Teachers in England.

MR. G. SIBLEY HAYCOCK, chairman of National College of Teachers, England. Mr. Gruver, ladies, and gentlemen, the first thing I would like to do would be to take off my coat and answer my friend Dr. Harris Taylor. [Laughter and applause.]

TRAINING OF TEACHERS OF THE DEAF IN ENGLAND.

By GEORGE SIBLEY HAYCOCK, F. E. I. S., L. C. P., Oral School for Deaf Children, Kensington, London, England; chairman National College of Teachers of the Deaf.

Two training colleges for teachers of the deaf were established by voluntary organizations in London, England, during the seventies of last century; one, at 11 Fitzroy Square, under Mr. William Van Praagh; the other, at Ealing, under Mr. Arthur Kinsey. Both colleges were managed by voluntary committees and maintained by public subscriptions and donations, augmented by the fees of students. Neither received either State recognition or State aid.

Eventually the Fitzroy Square Training College absorbed the college at Ealing, and was thereafter managed by the National Association for the Oral

Instruction of the Deaf, formed by a union of the two original organizations. I had succeeded Mr. Van Praagh as principal at Fitzroy Square in 1907, and I carried on as principal of the amalgamated colleges and of the oral school attached thereto.

A two years' course of training was laid down, and included both academic and professional studies. The students admitted to the course were required to possess the academic qualification admitting students to a normal training college. At the end of the course the students submitted themselves to two examinations—one in professional subjects conducted by the joint examination board of teachers of the deaf, which body granted a diploma of competency to teach deaf children on the oral method; the other, conducted by the board of education, from whom successful students received a certificate qualifying them to hold positions as head teachers in schools for the deaf.

A three-years' course was also provided, during the first two years of which the time of the students was largely devoted to academic studies preparing them for the final examination of the board of education. The last year was given up entirely to the study of the education of the deaf child.

The subjects included in the professional course were history of deaf education; principles of education and of school management; psychology, with special reference to the deaf; deafmutism, classification of the deaf and methods of their education; methods of teaching language to the deaf; methods of teaching articulation and speech to the deaf; theory and practice of teaching class subjects; hygiene and general physiology; anatomy and physiology of the special senses, etc.

A considerable part of the course was devoted to classroom demonstrations by the principal, observation of class teaching, criticism lessons by the students, and class practice. Practice was obtained both in the school of the college and in deaf schools under the London County Council. Visits were also paid to hearing schools and special attention given to the methods of teaching English and arithmetic in them.

The academic side of the training embraced the usual course prescribed by the board of education for students in training at normal training colleges, except that singing, theory of music, and science were not required. Special attention was paid to physical exercises and games, drawing, needlework, and handwork.

The Fitzroy Square Training College, which had no endowment, and by reason of the great war was being carried on with increasing difficulty, was closed in 1919, when a well-endowed training scheme was inaugurated at Manchester in connection with the university of that city.

In 1918 Sir James E. Jones, chairman of the Royal Schools for the Deaf, Manchester, offered to provide a sufficiently large sum of money for the purpose of training teachers of the deaf at Manchester University as a memorial to his deaf son, whose war work had brought about his early death.

The senate of the university agreed to institute a lectureship in the education of the deaf, and to establish in the faculty of education a special department for the training of teachers of the deaf. The committee of the Manchester Institution offered the university the use of their schools—the second largest establishment in the country—for the students' observation and practice, and Sir James added to his munificent gift by equipping the Ellis Llywd Jones Hall as a place of residence for the students during their year of professional training.

An important condition attached to Sir James's offer of endowment was that the scheme of training provided by the university should have the approval of the profession and, in due course, an advisory committee, consisting of representatives of the university and of the National College of Teachers of the Deaf (the British organization corresponding to the American Association of Instructors of the Deaf) was formed. This advisory committee now meets periodically at the university to consider questions affecting the training and welfare of the students.

The scheme came into operation in October, 1919, a lecturer having been duly appointed by the senate, though this step was taken before the advisory committee was set up and without consulting the wishes of the profession in the matter. The scheme itself, however, had been previously submitted to the national college and approved.

The Manchester scheme offers training to four classes of students:

First, students who enter the university for a four-years' course. The first three years of this course are devoted wholly or mainly to study in preparation for the degree of B. A. or B. Sc., the fourth being devoted wholly to professional work. During the fourth year the students are given a theoretical and practical acquaintance with the methods of teaching the deaf. They also attend lectures on the general principles of education and have a limited amount of practice in schools for normal hearing children.

This course, if satisfactorily completed, entitles students to the university teachers' diploma, and to the university certificate for teachers of the deaf. It also qualifies them for recognition by the board of education as certified teachers and as teachers suitable for appointment in a school for the deaf.

The second class of students are those who are already graduates of any approved university. These students take a year's professional training and receive the certificates and recognition accorded four-year students.

The third class of students are those who are already trained certificated teachers of normal children, having spent two years in a normal training college for elementary teachers. Such students take a one-year's professional course dealing more exclusively with the teaching of the deaf and the teaching practice is, as a rule, confined to schools for the deaf. The course leads to the university certificate for teachers of the deaf and to the students' recognition by the board of education as suitable teachers for schools for the deaf.

The fourth class of students are those who have passed the university matriculation or some equivalent examination and are admitted to a special three-years' course. The first two years of the course cover the requirements for the board of education's elementary teacher's certificate. The third year is devoted to the special course of professional training, leading to the university certificate for teachers of the deaf and to the students' recognition by the board of education as suitable teachers for schools for the deaf. (The admission of this fourth class of students is said to be a temporary measure only.)

Previous acquaintance with deaf children is not essential, though the university prospectus says it is desirable that students, and more especially non-graduates, should have some practical experience in teaching deaf children before entering on their course of training.

The following syllabus of lectures shows the scope and character of the course of professional work leading to the university certificate for teachers of the deaf:

Principles of education.

The history of modern education, including more particularly the education of the deaf.

Methods of teaching the deaf.

Development of language.

Speech training: Methods of teaching articulation; mechanism of speech.

The physical life of school children and school hygiene.

Physical training.

Handwork.

Blackboard drawing.

Anatomy and physiology (organs of respiration, of circulation, of speech. The nervous system. The ear).

Causes and conditions of deafness.

As already indicated, school practice is taken at the Royal Schools for the Deaf, Old Trafford, Manchester. These schools are admirably suited as practicing schools. They possess a fine equipment and have an attendance roll of about 350 children, who are (or at all events were until recently) grouped in four departments—the oral school for infants whose ages range from 3 to 7, the main school for the normal orally-taught deaf, the school for backward children, and the industrial department.

Holiday courses.—A statement of the provision made for the training in England of teachers of the deaf would be incomplete without some reference to the holiday courses arranged by the National College of Teachers of the Deaf and to the diploma examination conducted by the examination board of the college.

Many of the schools and institutions for the education of deaf children engage as teachers persons who have received no previous preparation for their special work. Some of them are trained teachers of hearing children, but others have had no training whatsoever. In order to supplement the daily experience and training gained in the classrooms under the guidance of the head teacher, the National College organizes each year a course of lectures in the following subjects:

History of deaf education, with special reference to the development of the oral method in England and America.

The psychology of the deaf.

Methods of teaching language to the deaf.

Methods of teaching speech to the deaf.

Hygiene.

Anatomy of the ear and throat.

Practical demonstrations of class teaching are given by experienced teachers. The course is held at one or the other of the schools for the deaf, preference being

given to those which are at or near a holiday resort. The lecturers are prominent leaders in the work and they give their services gratuitously.

These lectures admirably serve the purpose of guiding teachers in their studies for the professional diploma which is granted after examination by the National College of Teachers of the Deaf. This examination is held annually in July by the examination board of the college for the purpose of certifying as competent to teach deaf children on the oral method those teachers who are unable to take the course of training provided by the Manchester University.

The examination is conducted under the auspices of the board of education, and the diploma which is issued to successful candidates is officially "recognized" by the board.

The holiday courses serve the further purpose of constituting refresher courses for experienced teachers who wish to become acquainted with the latest developments in speech and language teaching. Attendance at them is also accepted by the teachers' registration council as equivalent to a certain amount of training. This teachers' registration council was established some years ago by the Government for the purpose of keeping a register of teachers who possess the necessary certificates and training demanded by the branch of teaching in which they are respectively engaged. It is hoped that ultimately, through the agency of the teachers' registration council, teaching in England will become a self-governing profession, as is that of medicine and of law.

Having outlined the provisions which exist in England for the training and certification of teachers of the deaf, I will now direct the attention of the conference to one or two of the many important questions which are inseparable from any consideration of the general subject of training.

1. *As to the student's knowledge of the deaf before training begins.*—I should like to hear this convention discuss the respective and comparative values of preliminary acquaintance with deaf and with hearing children.

In England there is a consensus of opinion in favor of a young student having at least a year's acquaintance with deaf children before his real training begins, and influences are at work tending to compel the future teacher of the deaf to qualify as a teacher of hearing children before seeking to obtain the special qualification of a teacher of deaf children.

I have attached to the staff of my school, but not as a member of it, a young lady 17 years of age, with a high-school education and a certificate qualifying her for admission to a normal training college, who, at the end of the present school year, will enter a London training college for a two years' course of training as a teacher of hearing children. After that course is completed it will be followed by a year's special training at Manchester to fit her as a teacher of deaf children. Throughout her year in my school this embryo teacher has been employing her time observing the methods of the class teachers, assisting in small ways, mixing with the pupils in and out of school, reading after school hours selected books on the deaf and their education, and trying generally to get an insight into the nature of the work of teaching the deaf, and into the nature of the deaf child itself.

The experience thus gained is believed to subserve two purposes—first the young student gets some idea of the work for which she is going to be trained and if she finds it is not what is likely to appeal to her permanently she can step out of it before she has wasted much time; and, secondly, her experience forms a useful background for her special training, and makes more intelligible to her a good deal of what she will study during her attendance at college.

2. *As to the supply of students for training.*—It is of the highest importance that the supply of students for training should be regular and ample in order that all the staffing requirements of schools may be adequately met. Serious attention needs therefore to be concentrated upon the conditions which determine and control the supply of raw material for training.

These conditions may be briefly enumerated as the stringency of the requirements imposed on applicants for acceptance as students, the length of training prescribed, conditions of employment after training, salaries, scope for advancement within the profession, and pensions. Salaries are perhaps the most important of these determining conditions.

The problem before the profession is how to secure such a supply of students as will permit of a selection of the right type being made. The supply of students being at present so meager, it may truthfully be said that it is not so much the training center or college which selects the student as the student who selects the college.

3. *As to the source of supply.*—The source or sources of supply are largely determined by the standard of the academic qualification prescribed as a condition for admission to the training center.

The Fitzroy Square College drew its supply from secondary or high schools and normal schools (training colleges for elementary teachers) and provided a two or three years' course of academic and professional training for students entering from high schools and a one year professional course for those entering from a normal training college.

The Manchester scheme draws its supply from universities and training colleges (normal schools) and provides a one-year course of professional training for all classes of students.

Many teachers feel that a one year's course of professional training, unless the student has already had a fair amount of acquaintance with the deaf child before entering upon his training, is inadequate. But on the other hand, as soon as a two years' professional course is spoken of, financial difficulties at once obtrude themselves.

The real question to be determined seems to be whether it is preferable to have a less highly educated teacher with an intimate knowledge of the deaf child and of the methods of instructing him, or a more highly educated teacher possessing a less intimate acquaintance with the deaf child and his educational treatment.

I will permit myself to make but one observation on this question of the academic attainments of the student.

It is in the best interests of the profession as a whole, as well as of its members individually, that the academic status of teachers of the deaf should not be inferior to that of teachers engaged in other branches of the teaching profession. It should at least be such as will entitle teachers of the deaf to a claim for any pension granted to teachers by the State in which they are employed.

4. *Finally, but of prime importance, as to the most desirable type of student.*—We shall be able to envisage the required type by considering in some detail our requirements as regards physique and moral character. First, as regards physique:

It may be taken for granted that no candidate should be accepted who suffers from any bodily defect, organic weakness, or hereditary tendency likely to handicap him in the discharge of his duties; or to prevent him from interesting himself actively in the out-of-door amusements and occupations of the pupils; or to deny him the enjoyment of that degree of health which makes mental work not only possible but enjoyable; or to render an early breakdown and resignation a probably contingency.

Eyesight should not be considered satisfactory if there is any defect in vision which can not be corrected by glasses.

Hearing should be unimpaired if the applicant desires to be trained as an oral teacher; and he should further be required to possess a good phonetic ear. A practical test should be prescribed to eliminate candidates who are unable to discriminate broad variations in pitch and quality of vocal sounds and who seem unlikely, with suitable training, to acquire a fine sense of discrimination for vocal sounds and an ability to imitate them accurately, with a view to discovering errors in production. A good phonetic ear is essential for the successful correction of the faults in vocalization common to the speech of deaf children.

There must be no malformation of the mouth; no variation, that is, from the normal, which would present unnecessary speech-reading difficulties to the deaf child.

Every applicant for training should be medically examined by a physician and a report furnished answering a series of carefully selected questions.

Now as to moral character. Think of the most successful class teachers, principals, and superintendents with whom you are acquainted, examine the grounds of their success, and you will find these grounds made up, very largely, of elements of their individual personalities.

Primarily, applicants for acceptance as students should possess a bright, cheerful disposition, and have an active energetic temperament. The possession of a markedly-morbid, or phlegmatic, or neurotic temperament should be a bar; as should also an indolent, shiftless disposition.

That divine thing, imaginative sympathy is a preeminently desirable quality in a teacher. It gives birth to a wide range of virtues of pedagogic value; e. g., intuitive understanding, charitableness of mind, loyalty, the "missionary" spirit, forbearance, and patience. The unimaginative, unsympathetic teacher is quite incapable of entering into the hearts and minds of his pupils and he is out of place in a classroom. He is equally incapable of entering into those finer relations with the other members of the school staff which make school life on both its professional and social sides move smoothly and pleasantly.

Enthusiasm, vision, courage: A man or woman who has capacity for enthusiasm, who possesses vision and is courageous, having strength of character; is

bound to succeed either as a class teacher, principal, or superintendent. Without enthusiasm in our work, we inevitably fail to overcome the innumerable obstacles in our path and become uninspiring drudges, whose mental outlook might well be labeled "A hopeless dawn."

Vision—the power that enables us to take stock and look ahead, to see where we are heading before we get there; the capacity to visualize the child at the end of his proposed course of training and be able to estimate his educational position and relation to post-school conditions vision of this kind keeps a teacher or a principal out of pedagogic blind alleys and insures for his work a healthy freshness, and an expansion and development in harmony with the pupils' future economic, social, and religious needs.

Enthusiasm is a teacher's motive power. Without it, he can get nowhere. It springs from a love of his work for its own sake, and therefore, students for whom teaching the deaf has no attraction, should be advised to try some other career. If a student is incapable of being thrilled by the prospect of emancipating the souls of deaf children, teaching the deaf is not his true vocation.

I would suggest that a second set of questions be set down on a form, to be answered frankly and honestly by the principal of the school or college at which the applicant was educated. For example:

1. What are the chief characteristics of the applicant's personality? In particular, is she usually bright, cheerful, optimistic? Has she a sense of humor? Is she energetic? Is she emotionally well balanced? Is she just in her judgments and dealings?

2. Is her nature markedly sympathetic?

3. Is she keenly interested in whatever she has to do? In what directions do her chief interests lie?

4. Has she foresight?

5. Has she strength of character and power of application?

There are of course many other qualities, desirable to have in a class teacher, but it is useless to expect to find them, in any measurable degree, in the raw student. Training and subsequent experience alone can develop them. Some priceless qualities do not reveal themselves, except under stress of appropriate circumstances of an unusual kind, and there exist no means of detecting their presence beforehand.

It should, I think, be the special function of the principal of a training center to set before the students, with appropriate impressiveness, those qualities of heart and mind which insure successful class-teaching and sound character training, and also those other qualities without the possession of which by the members of a school staff, the smooth, harmonious working of a school is impossible and the best results are unattainable. It is well to remember when laying down a scheme of training that prospective students will realize the best that is in them, only when the principal is one who possesses the power, to instill in them unbounded faith in their methods, to implant in them high ideals of service, and to inspire them with a lofty conception of their calling.

Mr. GRUVER. I am very sorry, but the hour has come for dismissal. It will be impossible to have much of a discussion of any of these papers at this time.

The meeting is now adjourned.

(Whereupon, at 12.25 o'clock p. m., the meeting adjourned until 1.30 o'clock p. m., this day.)

WEDNESDAY AFTERNOON.

The convention reassembled at 1.30 o'clock p. m., pursuant to adjournment, Dr. Percival Hall presiding.

Doctor HALL. The meeting will please come to order.

I wish to call your attention to the fact that the executive committee is to meet this afternoon at 5 o'clock in the kindergarten room, and any members here will please take notice of this.

It will now be our pleasure to hear a paper on "Methods of instruction used in the Montreal Catholic School for Deaf Boys," by Brother Gaudet.

METHODS OF INSTRUCTION USED IN THE MONTREAL FRENCH CATHOLIC SCHOOL FOR DEAF-MUTE BOYS, PROVINCE OF QUEBEC, CANADA.

By Brother H. GAUDET, C. S. V., Montreal School.

Mr. President, ladies and gentlemen, to begin with, I have to express my appreciation of the honor done me in being invited to read a paper before the honorable members of this most distinguished convention.

We are here gathered together to discuss matters relating to the uplifting and betterment of the deaf. Some topics in this connection, handled by experts, have already received due attention on our part, and, to our great advantage, many more will be submitted to our serious consideration.

As for me, instead of following the ordinary way of treating a question on like occasions, I have taken a cross road. I will content myself with briefly laying before you what we do for the deaf in our school.

First of all, I wish to tell you that we have, in turn, tried almost all the systems so far known of instructing the deaf—the sign system, the oral, the combined, manual, sign manual. But, for many years past, we have used the oral and the sign manual methods, which we consider as the best means to reach the goal we all have in view.

Pupils are admitted into our school from 9 years of age upwards. On entering school, young deaf mutes—that is, those under 14—are put in the oral course for one year at least, unless it be clearly demonstrated that they are out of place there. Those who fail to show any aptitude for speech during the first year are placed in the sign manual course the next year. As a matter of course, all intelligent young deaf boys physically normal in all other respects succeed in learning speech. There is no combination whatever in either of our two systems. One is wholly oral, the other altogether sign manual. Thus we have two distinct groups of pupils. Each group has its own playroom, lavatory, playgrounds, refectory, classrooms, study room, and dormitory. Preciseness compels me to add that the oralists are subdivided into two sections, one for small children, the other for large ones, and have each their playroom, playgrounds, and dormitory.

Being a teacher of the deaf for upward of 40 years—exactly 43 years—it has been the writer's good fortune to come in contact with many deaf-mutes and to study their needs. He has spent 16 years in the sign-manual course as teacher and inspector of studies, and the remainder of the time—that is, 27 years, in the oral course wherein he was at first employed as teacher for a number of years, then appointed inspector of studies until the present time. He visits the classes very often and nothing is actually done therein without his approval. In the articulation classes, he always starts the teaching of every sound himself with all the pupils when the teacher of such class has had little or no experience. He is very particular about the naturalness of the voice and the exactness of the sounds. The phonetical adaptation is persistently insisted upon, as it is one of the *sine qua non* conditions for acquiring good speech.

Every morning class commences with gymnastic drill and breathing exercises for a few minutes.

The two letters *p* and *t* are the first taught, as being, in our estimation, the easiest of the whole range of the sounds of the French language. Then we teach the vowel *a*, the least difficult of the vowels. But before attempting the emission of this phoneme by the pupil, we have the pupil place one of his hands on his teacher's chest and his other hand on his own chest. Then we babble loudly and rapidly the syllable *papapapa*. This expedient very seldom proves a failure. Another means, and not the least, we experienced to be of great assistance in acquiring a clear, sonorous voice, is the *coup de la glotte*—glottal explosive. When the pupil emits a distinct voice, we have him retain the vowel *a* for a little while after *p*, thus: *papapa*——. Again, exercise on *a* only: *a, a, a*, ——.

We repeat these exercises till we develop a clear voice.

With these three letters we form syllables which the pupil is called upon to articulate, write, read on the blackboard, and read from the lips: *pa, ap, ta, at, apa, ata, papa, tata, pata, tapa, pap, pat, tap, tat*. Needless to say that articulation, the writing of syllables or words from dictation and reading of the same on the blackboard go abreast.

Right after this comes the modulation drill on the vowel *a*: (The pupil keeps one of his hands on his teacher's chest and his other on his own chest.) Long *a* (exemplified); short *a* (exemplified); loud *a* (exemplified); soft *a* (exemplified). All vowels and vowel sounds are modulated in this way. In our mind this sort of exercises is of great moment.

Every newly taught element offers an opportunity for syllable drill at length. We hold syllabic exercises as very important factors in the teaching of speech to the deaf. They can not be overlooked if we aim at good articulation.

After having secured a good natural voice we continue the teaching of the phonemes, closely following the well-known principle, through the known to the unknown. We so proceed with regard to this principle that one sound taught is a preparation for the next. All exaggerations in the positions of the organs of speech are tabooed.

The oral teachers are of one mind about the object to be obtained. They concentrate their efforts toward giving the deaf a practical speech and a command of language equal to their needs. And, as a result, I think that our success in this line is very good.

During the articulation year the pupils are always kept busy in the schoolrooms. They either write letters, syllables, or words, according to their advancement, or draw, or count. During the first few days of schooling a good percentage of the class hours is spent in starting the pupils to write, draw, and cipher. They have special copies for writing and drawing, and booklets of the four simple rules so arranged and graded as to suit their capacity. Each pupil has a small abacus to help him to count, and there is a large one in the classroom for public demonstrations.

To give our pupils the idea of numbers, we make use of objects. Figures are taught as far as 5 at first, then addition drill at length follows. In the second place we add five new figures which make 10. Then addition drill again with these 10 figures, and so on, advancing slowly but surely. As I said before, our pupils have well-graded books for the simple rules. A rule is first worked out with the help of the abacus, then a second time without it. Sometimes those boys learn addition, subtraction, and even multiplication in this first year. It is so much gained for the following years, and that, without losing much time. We only need a few minutes each day to control their various tasks. The more intelligent pupils act as monitors in the class and are a valuable help to the teacher. As a rule, each of the pupils, in the course of the year, fills from eight to ten 200-page copy books of figures, as many copy books of drawing, and as many of copied syllables and words.

We ordinarily take a little more than a year to teach all the elements of the language, the diphthongs, the hiatus, and complex syllables. These last should be neatly articulated, and as a consequence require much time and much drill.

At the beginning of the second year or so of school we properly commence the language teaching. The five-column system comes in play here. It is put on the blackboard and remains there for two or three years. There are two very large blackboards in each classroom.

We have appropriate textbooks for language teaching, most of which are of French make. They are, as we want them to be, very comprehensible and well graded. They begin by simple intransitive verbs, then transitive verbs, and so on. They contain many exercises and readings in connection with the pupils' vocabulary. Every one of the readings is dictated. Moreover, the teacher gives exercises and readings of his own. The whole class is kept alive by questions. Each action performed is followed by questions put to each pupil.

In the third year, sometimes sooner, and during the years following, besides the customary work of the class, the pupils have to write a description of a given subject every week. This description is carefully prepared by a series of questions relating to the subject. Two journals per week are also on the program. One is made in common in the schoolroom, each pupil taking part in its making, the other is made individually in the study room. All these are corrected with care and handed back to the pupils, who have to erase the wrong words or misconstrued sentences and write the proper ones in their stead. They often transcribe the same in neat copy books.

At this stage of the course—that is, the third year—arithmetical problems are entered upon. The pupils have to decide for themselves what operation must be done to solve such-and-such problems. The teaching of religion is also commenced at this period. Geography, sacred history, and the history of Canada are on the program of the following years. All our textbooks, with the exception of geography in the fifth year, are especially edited for the deaf, and cover a six-year course, articulation year included.

All the pupils have four and one-half hours of class per day and one and one-half hours of study. Those in the French-English course have two and one-half hours of study.

The physical development of our pupils receives due attention.

A public awarding of prizes takes place at the end of the school term.

A special class for Catholics speaking English is regularly kept open.

The pupils have to pass two examinations in the course of the year.

Our pupils, as a rule, leave us by the close of the sixth year. Only a few come back after that, and they take up what we call the French-English course for hearing people, and they graduate after four years passed in that course.

Two hours a week are allotted to the teaching of drawing—pencil drawing, pastel, water-color drawing, and lettering. Lithography has a special time, four hours a week.

Sign-manual system: I consider this appellation as conveying a clearer idea of the system followed in our school, for it is hard to teach entirely through spelling or only by signs. The two are often blended. So, as far as our system is concerned, we prefer to call it sign-manual. There is little new to be said about it, for its program is about the same as the oral. The only difference is that one is conducted orally, while the other is carried on through signs and manual spelling. In the classrooms manual spelling must prevail, save when teaching religion or when explaining some difficult questions, where signs are used freely.

Religious services are conducted orally for one group of attendants and by signs for the other group. The preacher delivers his sermon by word of mouth as most preachers do, and there are two interpreters.

To help us in our work we have an unlimited number of all kinds of pictures and engravings, besides a fine museum.

A monthly paper, *l'Ami des Sourds-Muets* (the deaf-Mutes' Friend), is published in the interest of the deaf.

We also teach industries to our pupils: Printing, shoemaking, joinery, book-binding, tailoring, painting, and machinery. The boys spend two hours a day in the workshops. And when through their studies they may remain at the institution for three years more to finish learning their trade. This year there were 30 ex-pupils serving their apprenticeship.

With regard to their temporal and spiritual welfare after leaving school, the priests in the school, two in number, and all the teachers are ever ready to help them in either of their requirements. In fact, we do them many services, irrespective of the walk of life they are in.

These are hints of our work for the deaf.

I am not so sanguine as to believe that I have told you new things; I simply wanted to let you know what our school is and its way of imparting instruction to the deaf.

Now, you will allow me to add a few words of a speculative nature about methods.

Of the 76 public day schools for the deaf in existence in the United States, after the tabular statement of the American Annals of the Deaf, 73 are oral and 3 combined. Of the 64 public residential schools, 12 are oral, 2 oral and manual, 2 manual, and 48 combined. Of the 7 public residential schools in Canada, 2 are oral and manual, 1 is manual, and 4 are combined. The oral method, as a rule, is the preferred system of the public day schools, and the public residential schools have adopted in a large majority the combined system.

The advocates of the oral method are staunch oralists, whilst the supporters of the combined system are deep-seated in their belief that their method is the best means that has ever been devised by a human intellect to raise the deaf almost to a level with their hearing fellow men and, in some instances, perhaps, above them. The instructors of either of these two ways of teaching the deaf are doing excellent work unquestionably, and they emulate as to whom will excel the others, not from a motive of vanity or pride—though there is a legitimate pride—but with the pure view of doing more good to the silent class of people, and in this way they are worthy of praise. They will be looked upon—and rewarded accordingly—as men or women of good faith and strong will, clinging to what they think best for the great cause of the deaf and the glory of Him who worked miracles in favor of a deaf-mute man; they will be called blessed. Let their souvenir long live in the memory of all the generations of the deaf.

Yet are we to admit that the oral and the combined systems are of the same standard of usefulness to the deaf? And has not the time arrived when we should make another step toward further uniformity of reaching the deaf? I leave it to you to answer these two questions asked in all good faith. A common saying has it that variety is the spice of life, but I don't think it holds good in this case. To a certain extent there can be diversity in unity and unity in diversity.

Should this paper of mine be ever so little suggestive to any of you I will not consider it of no value and I shall be rewarded for what it has cost me.

In the hope that it might be of interest to some of you, I and my colleague, Brother P. Fortin, have brought a sample of each French textbook used in our school, along with a few specimens of drawing done by a few of our more advanced students.

Doctor HALL. We have a few moments for discussion of this very interesting paper by Brother Gaudet. I am sure he will be glad to answer your questions. I would like to ask Brother Gaudet one question myself.

Do you consider that the teaching of speech in the French language, and of lip reading in the French language, is a simpler matter than teaching it in the English language?

Brother GAUDET. No; this is a French school.

Doctor HALL. Yes; you teach French, but in your judgment do you think it is easier for deaf children to learn to speak French than English?

Brother GAUDET. I think it is, because the sounds are easier, in my opinion.

Doctor HALL. You spoke about teaching English also to some of your pupils.

Brother GAUDET. Yes.

Doctor HALL. That comes a little further along in the course?

Brother GAUDET. Yes.

Doctor HALL. To certain numbers of them.

Brother GAUDET. Yes.

Doctor HALL. Are there any other questions or further discussion?

Mr. FUSFELD. I would like to ask, how many hours of work do you have a day?

Brother GAUDET. Four hours and three-quarters a day, of class work.

Mr. FUSFELD. In one session?

Brother GAUDET. No; two hours and a half in the morning and two hours and a quarter in the afternoon.

Mr. FUSFELD. How long a school year do you have?

Brother GAUDET. From the first Wednesday in September to the third Tuesday in June.

Mrs. X. May I ask whether you teach English orally, if it is taught?

Brother GAUDET. Only to those who come after the sixth year, to the most gifted pupils.

Mrs. X. You teach English and French?

Brother GAUDET. English and French; yes.

Mr. HAYCOCK. How, orally?

Brother GAUDET. Orally; yes.

Mr. PUY. I want to say that the pupils from Montreal—I don't know how long they have been taking lessons—do very, very well. How long do they go to school?

Brother GAUDET. Six years, three in the French course and three in the English course.

Doctor HALL. Mr. Haycock, do you want to ask any questions?

Mr. HAYCOCK. No.

Doctor HALL. I want to ask a question as to the age at which you start children. Brother Gaudet, do you start them at 7 or 9?

Brother GAUDET. We start them at 9 years of age.

Mr. HAYCOCK. Is that a restriction of the kind of home they live in?

Brother GAUDET. No, we can keep the boys only for five or six years, and of course they have to make the most of the school, so they must be not too young to follow the lessons given to them.

Mr. HAYCOCK. What I want to know is whether you choose 9 years of age by principle or by force of circumstances.

Brother GAUDET. By force of circumstances.

Doctor HALL. Are there any further questions or any further discussion?

I hope you will all remain in the hall and wait for Sir Robert Falconer, who is here in the building and is going to address us in a few moments.

We had expected to have Sir Robert Falconer address the gathering at 2 o'clock, but he is now in a classroom being shown some of the work of the school with deaf children, and is so much interested that he would like to wait a few minutes before he addresses us. You know how that is yourselves with visitors; they become very much interested and want to know what is going on in our schools. Therefore, I am going to ask Mr. Steed, chairman of the art section, to take the chair and have a paper in his section at this time. We will then, I think, have our address from Sir Robert Falconer.

Mr. LYMAN STEED. This section has been very much upset, I am sorry to say. Miss Waugh, teacher from the Pennsylvania institution, has been ill for the last six weeks and is still very ill.

Mrs. Betts was unable to come. The heat in the Mohawk Valley was very bad and it affected her quite a bit.

Miss Doub has a member of the family who is very ill, so the only person left to really be present with a paper on the art section is Miss Belinda Daniels.

There is also one paper by Mrs. Corey of the Montana school which has been omitted from the program because I did not know she was coming.

We will not read Miss Waugh's and Mrs. Corey's papers, but the first paper on the program will be the paper by Mrs. Betts. It will be read by Mr. Betts.

ART—WHAT DEAF PUPILS SHOULD AND SHOULD NOT BE TAUGHT.

By Mrs. O. A. BETTS, Central New York Institution.

I shall have to answer the question, "Art—What deaf pupils should and should not be taught," by giving a brief positive answer and ignoring the negative side.

Children attending our schools for the deaf of all classes number 14,000. Of this number probably not more than 20 per cent complete the required course of study and a still larger number fail to advance beyond the intermediate grades.

This situation presents the following fundamental conditions: A large percentage of our pupils, perhaps 50 per cent, go to work without technical training or adequate general education and, therefore, it is essential that a foundation for vocational training be given through certain branches of art in the early stages of the child's development.

We want our pupils to render the best service they can. To do this they must know how to work as well as how to live. They will very soon learn that efficient living comes only from efficient working.

Art is art just as truly in the caning of a chair, the printing of a page, or the arranging of a tea table as it is in the lines of a piece of sculpture. The basic principles are the same. In fact no teaching of art can surpass the unconscious development gained from contact with the daily surroundings.

Every teacher should be an artist. Not all schoolrooms make any pretense toward the artistic. The color scheme of the room and the class of pictures and other decorations help to mold the plastic mind along the lines of real art just as much as the efforts of the art teacher.

The art spirit reaches from the classroom into the home. In many instances our pupils revolutionize the home. They have seen the need of harmony and beauty and suggest improvements that tend to produce better living conditions. A striking example of this truth came from the words of a former pupil, who said: "The knowledge of drawing and painting which I gained at school has served me well, both in my work as a seamstress and in my home as a housekeeper. My flower garden, which won first prize in the community contest, I planted with an idea of the proper blending of colors."

I have given little thought to the boy or girl of exceptional talent. They will require the same fundamental training.

In teaching art to the deaf there need be very little variation from the course pursued in teaching the hearing child. The hearing child can early express the imaginative thought through speech, while the deaf child has to resort to other means.

It would be impossible for me in the limited time I have to even touch upon the various forms of art work as taught in our schools for the deaf; therefore I shall emphasize only one branch, to which I have given special attention with young children, namely, modeling.

I know of no form of art that affords so much help and pleasure to a child, especially a deaf child, in expressing a thought than modeling. It appeals to the creative instinct in giving opportunity for handling as well as doing and at the same time it requires careful study of form. Modeling lays a good foundation for drawing. The child must really draw from three sides and use both hands. This gives more training than when only one hand is used. It requires the touch as well as the sight.

Modeling gives the detail of form and is better understood by the child. It appeals to the imagination, and the images stored in the mind are the ones the child likes to produce.

Let very young children first become acquainted with the material. Simple objects may be placed where they can see them just as a suggestion, but as they advance allow them to model something of their own choice. From real forms the child can be led to conventional forms.

Modeling is not so formal as other branches of art, yet it gives actual facts, which help to hold the interest of the child.

With small children the lesson should vary from day to day between the conventional and the imaginative object.

We do not hope to produce artists in the strictest sense of the term of all our pupils. We should train every child to do things well. To do this there must be a real "art sense," not wholly industrial but rounded out by a proper conception of the esthetic, which gives an educated taste. Every child should come under the influence of the general art quality, which should surround him in every phase of his training and to which he is entitled.

Mr. STEED. Mr. Stevenson was to discuss this paper. Is Mr. Stevenson present? [There was no response.] Mr. Stevenson is not here. Is there any other discussion? Is there anyone else that would like to say something?

We will then ask Miss Anderson, of the Maryland school, to read the paper on art work by Miss Doub, of the Maryland school.

Mr. BJORLEF. May I give one word of explanation before this paper is read?

Many of our smaller schools have unique features, and I feel that one of the unique features of the Maryland school is our art department. We have in Miss Doub a lady who has been with us for over 30 years, and who has given her whole life to the study of art. I hope that you have given some attention to the exhibit that we have of our art work in the art workroom. If you have not, I would like to call your attention to that exhibit.

I am very sorry Miss Doub could not be here to-day, but her brother is seriously ill and it was impossible for her to come.

ART WORK, MARYLAND STATE SCHOOL FOR THE DEAF.

By FLORENCE W. DOUB, Maryland School.

With the many improvements in the present manner of teaching the deaf in every class, from the primary to the advanced academic course, there have been added from time to time numerous other advantages. We may mention the indispensable rhythmic exercises, the classes in domestic science, manual training, athletics, military training, and the trades department, also the literary societies, with the debates, lectures, and plays. They are all working toward a broader view of life, and the progress and achievements of the schools.

Not least, among these, is the instruction in art. It should be keeping step with each department, a help and support to all of them. Not the old art of free-hand copying in pencil outline from the flat when there was no drawing from objects or nature, no color, lettering, design, nor handicrafts, but an art in which any medium is used that will best serve the purpose. We are making the educational methods of to-day more useful; not so much art for art's sake, as art in crafts, for the sake of things that have an influence upon us. At the same time we strive to develop an appreciation of the beautiful, and desire for beautiful surroundings.

As we are now in the midst of an advance in teaching, the question is not, how to find enough work for our pupils, but how to find time to use the ideas that are always occurring in our minds and what can be done to gain the attention and interest.

The classes for the deaf should not be large, 12 at most, if it is desired to give individual attention, and time of drawing only one hour each week.

In a school where there is only one teacher, have a studio or drawing room suitably decorated in order to give suggestions and inspiration, changing the displays from time to time, as any new line of work is taken up. Have a well-equipped room, with closets and shelves stocked with supplies. This avoids confusion and wasted time in handling materials.

It is a good idea to have the grade teachers come to the drawing periods with their classes for the purpose of keeping order, leaving the drawing teacher free to give all of her attention to the lesson. She will then have an opportunity to discover those who have a special talent, and to assist those who show very little taste or interest. Even then how fast the minutes fly, leaving one almost breathless in the effort to give a word or stroke here and there.

Study or prepare the lessons. Lay out a course to suit each class. If you find you are going too fast, or the things blocked out do not fit, rearrange the course, or change it entirely, until you do get something the students are capable of doing. In fact, each year classes differ. New subjects must be introduced. It may be necessary to emphasize some particular point or to give extra time to some pupil who did not come up to your expectation the year before.

One who undertakes to teach art must be a thinker and a doer. Have your heart in the work. There can be no art where there is no art atmosphere. Be in sympathy with your pupils. Teach only what you know to be right through having personally tested and proven its value. In the words of a well-known art instructor, "Draw, and the child draws with you; talk and you talk alone." Take note of what other teachers are doing. Strive for new ideas and creations of your own. Read history, literature, science, and psychology; they will help you think and know what is best for each pupil. Above all manage to arouse and excite joy and enthusiasm. Then what pleasure for you and your scholars as you see the work developing from year to year.

The estimate of elementary work ought not to be lowered. The younger grades must have a thorough drill in simple drawing, using as mediums pencil, charcoal, and colored crayons. Draw from common objects and nature, both in autumn and spring. Free-hand cutting is very beneficial, it often being necessary to teach many of the smaller children to handle the scissors. At times intersperse the work with simple problems as constructive work to keep up interest and avoid monotony. Intermediate classes should have similar study, with brush and color introduced. Pen and ink drawing of simple alphabets and design. Memory drawing both in grades and advanced classes is fine practice for the eye and builds up the sense of observation. Advanced pupils continue color work, practice of lettering both free hand and with the lettering pen, designing and outdoor sketching and drawing for reproduction.

At times when there is a separate art room, it is difficult to correlate with the work of the grades, but this can in a way be modified by using as subjects the holidays of the year, the seasons, and the conditions of the weather, also by several

teachers agreeing to work together from time to time on any subject of mutual interest to the school.

It is best to introduce very little industrial and applied art in the early part of the year. Ground the work on good drawing; after that, design one or two good forms of applied work, not dozens, fewer pieces carefully finished, and our art will be more serviceable and less superficial.

There is hardly a better problem nowadays than the poster, which applies the principles of drawing, color and design, so well in a practical way. It demands a knowledge of the science of advertising and is a medium which is seen and understood by numbers of people in any community. Original costumes appeal to the hearts of the girls. Then there is interior decorating, simple bookbinding, basketry, enameling book ends, trays, and tiles. Block printing is fine practice. Leather work, tesso, tye, and dye, and batik are all forms of applied art which when designed and executed by the pupil give excellent training in manual dexterity and helps to develop the mental faculties.

Now, all this art that is being taught to our school children will not make expert designers or industrial artists. For one to become expert, we all know, involves long future study, but it prepares the way, or gives a start, so to speak, in the right direction. It gives power of expression, and an appreciation to all. It places in the hands of those who are especially talented the key to advancement.

For those who, after leaving school, wish to pursue a higher course in art, as it relates to industrial work, there is a wide scope. Great progress in the art of printing has been made lately, but much remains to be accomplished. Beautiful forms of typography, correct color, the proper use of decorative material, can only be planned by craftsmen who have exact knowledge of such things. It is thought that the time is coming when every first-class printing establishment will prepare layouts for all important jobs of printing. A number of well known schools of industrial art have a special course in typographical designs, the course being open for all printers, apprentices, and students.

It is only recently that window display has received the attention that fine merchandise demands. Window displays require good taste and judgment, with a knowledge of color. Why not learn how to make these displays most presentable and arrest the attention of the passer-by? Japanese flower arrangement has always been a dignified art. Whether to mass the flowers, or to let the leaves be the theme used, to bring out the exquisite grace or hue of a few blossoms. To know the proper receptacle; should it be tall and slender, or short and broad; brilliant in color, clear glass, or unpolished metal. One versed in this knowledge could be a professional director, decorating halls and churches for weddings and dinner parties, or for any occasion where these beauties of nature are to be used.

The demand for costume or dress designing is constantly growing. Think of the home dressmakers' dependence upon the illustrated patterns, the fashion periodicals, magazines, daily newspapers' fashion pages and catalogues of manufacturers and department stores.

Dressmakers are gradually realizing that sketches help their designers. In this work there are many specialists:

The sketcher.

The detail worker.

The head-and-hand artist.

The technical specialist in pen and ink, wash, crayon, and color.

The work is so varied any one of its forms can be learned. The students can select the one for which they have the most aptitude.

Interior decorating implies a knowledge of how to furnish your home with things most convenient and presentable. We must insist that everything we purchase, whether it be a piece of furniture, a curtain for the window, or a rug for the floor, be beautiful and that it be made in America. The home molds our taste and lives, and must satisfy the mind and body. It must be sanitary and not always are costly things the best. May we hear of many deaf boys studying how to arrange furnishings and decorations in order to make attractive homes and an enjoyable living for the family.

Other industries will occur to the mind as we continue to consider the facts, but those already mentioned will suffice to acquaint us with the opportunities offered a well-trained and capable deaf applicant for a profitable and pleasurable employment.

We hope the time is near when generous friends, or perhaps the larger schools will see fit to establish scholarships for higher training in the practical arts, desiring to add to the efficiency and usefulness of their graduates.

Let us, the teachers, take upon ourselves the task of encouraging and cheering our young army of deaf recruits to take their place in the channels of life, where they are best adapted to serve, giving them this message of advice, lately published in our Maryland Bulletin.

Work, and the shadows that harbor your ills
 Will pale as the night into day;
 Work, and the sun that comes over the hills
 Will lighten your load with a message that thrills
 And drive all your problems away.
 Cares of a year will dissolve with a rush
 As you work with a definite aim;
 Jealousies petty you easily crush
 Out of existence and worries you hush
 In your new love of playing the game.

MR. STEED. I understand Sir Robert Falconer is now here, so we will now suspend the reading of the papers and listen to his address.

DOCTOR HALL. We are very much pleased indeed to have with us this afternoon the president of Toronto University, Sir Robert Falconer, who will address our meeting. It is my pleasure to introduce him to you now.

ADDRESS ON EDUCATION, BY SIR ROBERT FALCONER, PRESIDENT OF TORONTO UNIVERSITY.

SIR ROBERT FALCONER. Mr. Chairman, ladies and gentlemen, it is a great pleasure to me to be allowed to come here this afternoon and speak to you for a short time on what I hope may prove to be a subject of some interest to you who are engaged in the instruction of those who have been deprived of the very important sense of hearing.

Allow me also as a Canadian and as representing one of the Canadian universities to express to you who are Americans, who come from across the border, our gratification at your being here this afternoon and being the guests of Canadians.

There are also, I think, a number of representatives present from Great Britain. We look upon them as not exactly our fathers and mothers but as being very closely related to us, and I think possibly they will recognize that we are at least daughters in our own home on this side of the Atlantic.

But wherever you come from, from outside the Dominion; whether you come, as you do in great numbers, from the United States or from—I shall not say a greater distance, because some of you from the United States come very far—but whether you come from across the ocean, I am confident that Canadians interested in education will be very much pleased indeed to have you here.

I had thought of saying a little at the beginning about the function that we in Canada play in binding together the two sections of the English-speaking world. The people who speak the same tongue are naturally associated in some of the most potent ideas which go to constitute civilization, and we who speak the English language ought to be bound together more closely than other people are from the very fact that we do use this language. Of course, language in itself does not necessarily constitute even the most important bond of nationality. For instance, in Britain there are different languages, the English language, Welsh, and Gaelic. Those are different languages, and it is not necessarily the possession of the English language

that has bound those sections of people together; it is their common experience as well.

But language is a very important link. In Canada, for instance, we are working our way toward nationhood, and we have here the problem of developing a unity, a combined nationhood made up of two great nations, those who speak English and those who speak French. We are doing it gradually, doing it amid difficulties. Differences of language unquestionably create difficulties, but we are welding together a strong people north of the line here, who have in their official relations two languages that stand side by side, and our relations to-day in Canada between these two sections are much better than they have ever been in the past, and I haven't any doubt that we Canadians are going to make a success of our national life in spite of the handicaps of the two languages. But a common language is a very important link as you all recognize. Of course, if it were a crude, an undeveloped, and early language such as savages have, merely for expressing the most narrow wants, the smallest necessities by way of interchange—a language of that kind is not much more than an instrument of barter, a very meager commercial instrument; but where you have a rich language like ours, a language that comes down through hundreds and hundreds of years, a language freighted with emotions, common emotions such as we have had, a language that expresses the finest thoughts that the human mind has yet been able to work out for itself; a language so vast and so varied as ours is—a language of that kind is very much more than a means of crude interchange that merely brings people together on the basis of common, material wants.

Go back to the origin of our language and you go back, as to a great tree that has grown up, and you may read through the circles of the trunk the centuries and the influences that have through the centuries built up that tree. And so it is with the language. You must go back to the early period, even the pre-Celtic period, the Celtic period, the Norse period, and then follow the various periods that have succeeded up to the present.

Now, the point is this, that the English-speaking world, particularly those of us who belong to the British commonwealth and those who belong to the United States, have in common a language which was deeply enriched before the two sections broke apart, before the two branches of the tree, as it were, diverged from the common trunk; and it is in that common trunk from which we both come—it is in that common trunk that there is the richest inheritance that each of us has.

Up to the beginning of the nineteenth century—up toward the end of the eighteenth century, when the division became accentuated—there was a common inheritance of our tongue the like of which we have never had since, rich though the nineteenth century has been.

It is in the possession of this rich language of ours, expressing the common ideas that enter so deeply into our nature, it is in the possession of that that we can discern a link—or not a link, but something to bind us together, as an ordinary, crude, undeveloped language could not possibly do. Just think of some of the ideas that are rooted in our minds and that we express in language. I have just been looking with great interest at the wonderful work that is being done by these ladies with these children, these bright, happy children

in the classrooms. Think what it means to take one of those children with a mind blank in so many ways except to the impressions from the external world, that vast structure that comes into each mind almost insensibly, but nevertheless a blank to so many of the other things. Think what it is to take one of those minds and imbue that mind with the thought that attends on speech.

The very power to utter, the very power to give expression to thought is itself a creation of the idea. An idea that can not be put into words is not a classified idea. An idea to which you can not give expression, you probably do not understand yourself, and one of the reasons why so many people are misunderstood is that they are not able to express what they mean, and the reason is that they do not exactly know what they do mean, and until they know what they mean they, of course, can not let anyone else know what they mean; but if they are able to express it clearly, it means that they have clear-cut conceptions.

So a rich language means great ideas that have been wrought out through the history of the race. Take one of the greatest ideas of all, which is freedom. We all think we know what we mean by "freedom." I venture to say we do not. I venture to say we understand very little of what is meant by "freedom." The human race is only gradually working its way into freedom, but to understand it fully we go back to our history, to our common literature, and through the courts and down through the struggles of history we see what this idea meant and the idea is embodied in the word and that word carries with it the whole history, though we who have inherited it rarely consider what is involved in it.

Those of you who know the New Testament will remember that in one of the Epistles of St. Paul there is a statement to this effect—it runs something like this, "Fitting spiritual things with a spiritual language." This is really the proper interpretation. Not comparing spiritual things with spiritual: That is not the meaning, but the words imply the giving expression to spiritual ideas in a language fitted to convey their meaning. Now why? Because in those early days a new experience had broken in on the world, the like of which they had never known. They did not know how to express what their ideas were. The ideas were too big for them. They could not get words. They could not clarify these crowded thoughts that came in those glorious periods when a new experience moved them. It was a new epoch in the world. There had never been anything like it before, and these ideas come upon them with such a volume, such an outpouring that they simply could not express them. And then the Apostle says later in that epistle, as the churches began to grow in intelligence, "You must get a spiritual language to give expression to the new spiritual ideas that have come." And of course Christianity brought in the new language; Christianity brought in new words. Take that very word "love," for instance. I simply want to illustrate my thought that a rich language means community of ideas, and community of ideas constitutes really rich civilization.

We English-speaking people with this common, rich language of ours have embedded in it and have given clarified expression to these momentous ideas that have remade the world, the ideas that we who speak the same language say the world must never lose, great ideas as to freedom, as to justice, as to the treatment of those who

have a lesser chance in life than others. The whole attitude toward those who are less privileged; all that finer instinct and humanity have been wrought out through our poets and through our language into a very fine type of civilization. I believe none finer ever existed than that which we have. And that comes to us in common. It is not limited by boundaries; it does not spring from the land; it is not won by exploitation. It is these great ideas that have made our civilization worth living in, that have made us what we are; these ideas that have been wrought out through centuries, that have embedded themselves in our very being and have taken a beautiful expression in our language—it is that these things that have been transmitted to us shall be preserved and kept for the world that we must stand together; that there may not come in a great flood of barbarism that will flow over it all and submerge the past and leave nothing but débris where there was once a smiling landscape. That is our purpose in hoping that the English-speaking world may stand together; it is because we speak a common language that it is possible and it brings us together.

To return once again to what I said before, the things that we hold in common from that past history and language of ours are greater than the things that either of us has produced in the century and a half since we went our own ways.

In Canada we stand as neighbor to the United States. We understand you, I think, as no other people in the world do—I think we ought to at least—I believe we do, not only because there are so many of our Canadians over the line, and because also so many from the United States come to Canada, but because of our environment; we are surrounded by so many things that are similar, so many things that are almost the same, and therefore I do believe that we understand you better than any other people in the world understand you.

Then again, as I have already remarked, we are British. We understand, I think, the old country in a way that you can never understand it—what we call the old country. When the war came we went into the war by instinct. We did not have to debate it; we said, "No; that is the place for us to be." It didn't take us half an hour to make up our minds, and it was the reasonable, natural thing for us to do. There are many things in England that do not quite suit us, and through the history of Canada we have worked up our own government and Britain has been very generous to us, and to-day we are a nation, a growing nation as I have already mentioned, within a circle of nations. Britain never says a word to us. We are absolutely free to do just as we choose. In fact, the other day, you may remember, actually one of our statesmen signed in Washington a treaty that had to do with Canada, in the name of the King, and Sir Auckland Geddes, the British ambassador, did not sign. Now some Canadians think that was right and some people think it was not the thing to do. I am not concerned about that. The point I want to make is that Great Britain has given us in Canada the most absolute freedom, not only of our own affairs but has also given us great freedom in foreign affairs.

You people across the line do not believe much in the League of Nations, but we in Canada do, and we have had our representatives over at the League of Nations meetings, and we actually signed the

treaty, too, ourselves over there. You can see the freedom we are getting into. The reason I have lingered on that for a moment is this: Understanding as we do Britain by instinct, inheritance; understanding you across the line because you are our neighbors, because the same blood runs in our blood, and because of our environment we are able, I think, stretching out each hand, to bring the two portions a little closer together. It is a great matter of thankfulness to us in Canada—or it will be—if we shall be able in any way to strengthen the ties that hold together this great common civilization, represented as it is so far by the two sections of people who speak the same tongue.

If that is correct, let me proceed a little further to say that I think one of the most powerful of the ideas of this civilization of ours is that of education itself; that our common ideas and purposes in education are immensely strengthening ties to hold us together. If we work for high purpose and similar views and objects in education, we shall naturally come together. Let people choose a high purpose and set their mind on it, and they will come together. I believe that in education the English-speaking world has very much the same conceptions. Fundamentally the English-speaking world has come to believe—not only has come to believe; it has always been the view—that the great purpose of education is to produce character, not cleverness, not versatility, but to produce a manhood and a womanhood that will not only stand the strain and the stress of human life, but will be able out of the raw materials of human life to create a constantly developing and improving character as the decades pass by.

Recently there has been a very great deal of attention paid to education. Will you allow me for a few moments just to give you a brief survey of the world as I see it since the war in regard to its educational interests? I shall take the United States and Canada last.

Go to Britain. Since the opening of the war the interest of Britain in education is manifested partly by the extraordinary number of very, very valuable reports that have been put out under Government auspices in regard to various kinds of education, all kinds of education, school education of every type, and university education of every type. Some of you are aware, for instance, of the great report on the teaching of English, both in schools and in the higher institutions, of a committee of which Sir Henry Newbolt was the chairman. That report on the teaching of English is a classic, one of the finest things in the English language. That is only one of four of the major reports. Then there were reports as to the development of the universities. Old Oxford and Cambridge have had commissions sitting upon them, and the Government is going to help them by very much larger grants than they have ever had before. Along with that may go a certain amount of control, but not anything like as much as we have on this side of the Atlantic.

Then one of the questions most eagerly debated in England has been the salaries of teachers; and Sir Eric Geddes, who was one of these efficient business men who look upon efficiency from possibly a narrow point of view in some ways, was bound that he would take the ax and cut off a great many of the appropriations that were devoted to education. Now, although England has been carrying a

tremendous burden of taxation, the people were unwilling that the estimates on education should be cut down.

Staggering as she is under a load that I do not see how it is possible for her to carry, yet staggering as she is under that load, education is something that must be maintained. That is England. You go to the Continent—I shall not linger much over that. I do not know it so well, except as echoes come again and again from the Continent that they are worrying, those who know the Continent best, as to whether it will be possible for the educated classes to survive. I am told by those who have been there that the workman, the artisan, can make a living not so very much worse than he used to make, even the farmer can, and that some men have been able to amass considerable fortunes, but the great middle class, living on salaries, particularly the teaching class, are not only on the ragged edge of poverty, but they are in many, many cases in the most direful want. There is every cause for anxiety in Europe lest the educated ideals of Europe may be submerged. At any rate, it is not at all unlikely that, as the result of the war, the supremacy, the intellectual supremacy of the world has passed forever from Europe to the English-speaking world, that the British Empire and the United States will hereafter have to take the load, the intellectual load, of the world; that the intellectual life of Europe, particularly central Europe, unless there is a rapid change and safety comes from some quarter from which we do not yet see help, may forever be changed. Those who know most about it are, I understand, fearful of the conditions of affairs.

When we come to this continent, your problems and ours are very much the same to-day. What our people are asking to-day is this: Are we getting the returns in education from the money that we are spending upon it that we should? You know how in the United States a number of reports have gone out recently asking that question. You know how again and again it is being said, the query is coming up, Is the money that is being poured into education bringing the returns that it should bring? And there are indignant questions and answers given according to the spirit, I suppose, in which the question is asked or answered. I do not think that your people in the United States or ours in Canada are going to find fault long with the spending of money in itself. I can not think that rich countries like ours are going to object to money being spent on education. With all your wealth, the burden that you are bearing for education in the United States is not a staggering burden at all, and I do not believe that your people will ever go back on that, just as I think that we Canadians have broad enough backs to carry the burdens that will be necessary for us to carry in order to erect our structure of education. But I think this question is coming up and is being asked by many: Is the money that is being spent bringing the return that it should bring? That is the thing. People are realizing that mere money will not produce education. You can put up beautiful buildings—here is a beautiful building, and all through the United States you have magnificent buildings—now, you may put up magnificent buildings, and so often we think of the building itself, but it is not the building—of course this is commonplace to you, but still it is one of the commonplaces that we must never forget—it is not this beautiful building that counts, but it is the kind of work that I saw in those two classrooms just now that counts. That is the im-

portant thing, and the point is whether we are getting the return in that kind of thing that we should get for money that is spent. That is the question that intelligent people are asking and are going to continue to ask. If we are getting the return in quality that we should get, there will not be much difficulty in the long run on this continent in getting the material resources wherewith to carry it through, because we are a very rich people, and we don't mind spending money provided returns can be given. But what we have to ask ourselves again is, What is this education that we are getting; what are the returns that are coming from it?

It used to be thought sufficient, and you have often heard it said, "Oh, just enable people to read and write." Very superficially people will speak of an educated person as one able to read and write. You look at a man who has a very fine automobile. He drives that automobile into a beautiful garage and gets out and goes into a very fine house and picks up a paper and sits on his veranda and reads the paper, and we say he is an educated man. Not at all necessarily an educated man. He has simply been able to read a newspaper and through the quickness of his intelligence has been able to put two and two together often enough to buy a motor and do as other people do, build the same kind of house as everybody else has built, and buy the fashionable motor of the day, and sit on his veranda and read—what? Anything that comes along. Mere words, it may be, bringing him certain news. That is not an educated man at all. On this continent particularly we have fallen into the idea that where we find material development in our great cities, with our fine suburbs, our fine buildings, in those fine buildings necessarily educated people are living. They are not necessarily educated people living in those fine buildings at all. What we have come to see is that the education that we must get for the money expended is not the education that is going to give quick returns, quick returns merely of the intellect, because those quick returns are merely the exchange, or, rather, that ability is merely the means of exchange for material things.

We are coming to see on this continent that when we speak of education what we want is not merely ability to make a living, but we want education to make a life, to put something into the living, to give contentment. That is what we want, really to bring something new into the spirit and to bring out of the depths of the spirit treasures that are hidden there.

Watch those children; the latent powers are being developed by the teachers in the classrooms. There life is being created. You can see it being created. It isn't merely the technicality of being able to read and write that counts, but it is the technicality in order that the thing may be read which will bring out the latent power in the individual. That can only be done, not by rule of thumb, it can only be done where spirit touches spirit; where in education personality puts the hand on personality; where the rich soul comes in touch with another rich soul. That is the way education comes.

One great teacher in an institution, one personality with power—from that personality, from that teacher there radiate forces that are immeasurable. These are the hidden forces of life.

Now, drawing to a close, let me linger on this for a moment, that we who are teachers have more and more to create in our scholars

the desire to read the right kind of things, to create the knowledge as to what the right kind of thing is, also the desire to read it when we know. The question will come to us again and again, "How readest thou?" That is what we should ask of our children. That is the question. The mere ability to read, of course, is a common attainment. The mere ability to read may belong to any scoundrel, but the person who reads in order to learn wisdom is each day being educated into a fuller life. Liberal education is not merely the education that consists of a knowledge of Latin and Greek and that kind of thing. That is not liberal education. It does not necessarily constitute liberal education. A man may be able to write Latin verse and Greek verse with a good deal of fluency, and yet know very little about the heart of the Latin literature; he may not have absorbed the wisdom of the Latin and Greek classics.

The heart of a liberal education is the possession of a certain amount of wisdom that has come through intercourse with the great minds of the past. A reader, a really thoughtful reader, boy or girl who has only read a little but has read some of the best things and has pondered over them, having read them in the right way, that boy or girl ought to be a little wiser than other people—not that they are paragons of wisdom, but a little wiser than other people or than they would have been without that knowledge. That is one element in a liberal education, and a boy or girl who has been liberally educated ought to have a little finer appreciation of the beauties of this world; ought to be able on this magnificent June day to take a while off and just look at the beauty of things and allow the beauty of things to sink into the soul and create in the soul something responsive to the beauty of the world without. These observational faculties ought to be trained, and the appreciation of beauty, not only of the outside world but of poetry and of art. They will not be great artists, nor will they be great poets or painters, but they will have a little appreciation of beauty and also an appreciation of truthfulness, some ability to see things as they are, to report things as they happen, not to say "I think," and then to report something that never did happen.

Then, finally, the man or the woman who is liberally educated will have a good deal more charity toward all people, because having read some literature and having seen something of the world and having gathered some wisdom, he will realize that people are handicapped in life, that they have all sorts of inheritances, and that there are temptations of all kinds lying around about us, and that no one can penetrate very deeply into the soul of another; and, therefore, knowing these things, the educated man may believe that others may have traveled a more difficult path from that which he was asked to follow. That being so, there will be an element of charity in his judgments.

Wisdom, duty, truthfulness, and charity, these are results, as I see it, of a liberal education that we ought to aim at, and those are elements that should enter into characters. They do not depend on exalted subjects. Wordsworth says the virtues, the common virtues, are spread abroad like flowers and the greatest beauty often is in the most common flower. But it is for you and me who are spending our lives in education to cultivate these flowers, and to see that the area that we till at least is so fertilized that the money that is spent through us will give a yield that the common people will say is worth paying for.

Doctor HALL. I am sure you will all join me in a rising vote of thanks to Sir Robert Falconer for his splendid address to us this afternoon.

(The convention rose with great applause.)

Mr. STEED. There is one more paper in the art section and we will now have that paper. We are very glad to have with us Miss Daniels, of the Illinois school, who will read us a paper on photography.

PHOTOGRAPHY FOR THE DEAF.

By Miss BELINDA DANIELS, Illinois School.

In a recent book on retouching negatives and finishing prints, published by Marion & Co., London, England, the author, Robert Johnson, says:

"Those with defective hearing but possessing good sight find retouching and general photographic finishing congenial occupations, for the work is restful and very little conversation is necessary."

In the *Volta Review* for June, 1923, Laura A. Davies, in her article on "Successful deaf people of to-day," tells of Frances and Mary Allen, photographers.

"Both sisters were trained for teaching and were so employed for some years until rapidly increasing deafness caused them to cast about for some other occupation which would be less dependent on hearing and at the same time provide a livelihood.

"Their choice of photography was a wise one. The work has not only been a constant joy but has produced a satisfactory income as well. Miss Frances has long been totally deaf; Miss Mary can hear conversation with the use of a flexible tube and is helped somewhat by lip reading. Of course, this handicap has made some things harder, but of all professions photography is as little dependent on hearing as any can be. To by far the greater part of photographic work deafness is no hindrance at all."

Two deaf men from the Illinois school, Mr. Hainline and Mr. Faulkner, have studios of their own, and so far as I can learn their deafness has in no way interfered with their business.

Miss Gretchen Fahr, a deaf girl in Iowa, has taken charge of Fahr's studio since the death of her father last year. And probably you all know of Mr. Pach, of New York. I had heard of his work and seen it in art publications, but didn't know till recently that he was deaf.

Ora Gibson, a deaf girl from the Illinois school, and whose home is in Jacksonville, does retouching for the profession at her own home. During the busy seasons she earns around \$40 a week, and once her mother telephoned me that Ora had earned \$51 in four days. But, of course, to do that she had to work all day and far into the night.

Gwendolyn Caswell, another girl from our school, is spotting and finishing pictures in Koehne's Studio, in Chicago, and two girls who graduated from our school this year expect to work at photography.

In the January *Annals* the Illinois school is the only one listed as teaching photography, and so I will give you a little idea of our department. We have tried to have the equipment and arrangement as much like that in a regular studio as possible so that the pupils will be accustomed to working conditions.

We limit the number of pupils in a class to six. The beginning classes are taught to use the Brownie camera, develop films, and print pictures. From that they are taken on through the years and taught to use different kodaks and cameras, make enlargements, mix chemicals, do retouching, spotting, and finishing. With the advanced classes we devote as much time as possible to portrait work, and especially to retouching, spotting, and finishing, for in that part of the work lies their greatest opportunity for earning a living. We try to make the work as practical as possible and then with the knowledge they have they can go on and do different things after they leave school.

To the pupil who doesn't care to use it as a financial aid, photography brings a great deal of pleasure, for pictures and art of all kinds, whether made with the camera or other aids, are to the deaf what music is to the blind.

ART AS IT IS TAUGHT TO THE DEAF.

By ELLA V. WAUGH, Pennsylvania Institution.

"Be thankful for the work of giving to the boys and girls that magic something which makes them look higher than a dollar mark." That, in the writer's opinion, is what an art course should give children—a key which will open the door to many wonders and prove an influence all through their lives. In an age when the accumulation of money is to most minds the high-water mark of success, it becomes increasingly important that our future citizens be taught that "in all true work * * * there is something of divineness." We need envy no person their wealth if we possess the ability to combine a few simple materials and so to produce something as beautiful as wealth can buy.

Let us consider our special field. The silent children shut off from all that is beautiful in sound have a greater need than their hearing brothers and sisters to be taught to see and seeing to appreciate the beautiful around them.

An art course in schools where trades are taught should correlate with those trades. The better plan is to have the classes report from the shop to drawing rather than from the schoolroom to drawing. The ideal method is to have a drawing room in the industrial building and give the carpenters, printers, etc., the instruction necessary for the project which the children are doing. Each group would report according to the grade of work done in their respective shop classes. The printers would be taught such items as relative spacing of margins, design for initial letters, book plates, magazine covers, perspective drawing, balance of design and letters on a cover, color theories, and the theory of etchings. The bakers and shoemakers need poster work, which involves perspective drawing, color theories, lettering, the proportion and arrangement of the design and lettering on the posters. The bakers, in addition, need design in the arrangement of their wares in window display, in cake decoration, etc. The shoemakers should understand why a plain, well-built stylish shoe looks better than a very ornate one. This, in general, is the idea of correlating drawing with the trades.

In schools where it is necessary for the children to come from the class rooms to drawing, the above plan is very difficult to manage. Frequently, there are pupils of three to four different trades in one class. However, the difficulty can be partially overcome by giving the bakers, shoemakers, and printers work in lettering at the same time. The same thing can be done with perspective drawing, color theories, proportion and arrangement of design for posters and magazine covers.

Before they are old enough to be taught trades, the children should be given work preparing them for the line of work most likely to be their choice later. Moreover, this foundation work should so train their fingers that they gain confidence in their ability to create. Just the simplest knowledge of color and arrangement of design in rug weaving will give the most backward child a new outlook on life. The colors, at least, will be noticed when they are seen again. Some projects which serve admirably as preliminary work for small girls are the following (to be used in teaching weaving during the first year):

(1) Small rag rug, (2) small rug with wool border, (3) small raffia rug, (4) round raffia mat, (5) doll's purse of raffia, (6) brushed wool mat, (7) doll's cap, (8) sweater for doll, (9) woven rag bags, (10) towel and wash cloths, (11) woven hammock, (12) raffia hats for dolls.

During the second year the following projects may be given: (1) Woven pillow tops, (2) woven bags, (3) table runners with designs, (4) table runners with square design, (5) pillows with applied design, (6) woven furniture for a doll's house, (8) crochet work including bags, (9) knitted sweaters and caps for dolls and teddy bears. Under the regular basketry work there is included during this year weaving with (a) paper-covered wire called paper reed, and (b) with pine needles. The paper reed is used for (1) mats, (2) kindergarten baskets, (3) crayon baskets, (4) flower baskets. Pine needles are used for (1) fruit baskets, (2) flour baskets, (3) work baskets, (4) fern bowls, (5) baskets with large handles, (6) candle sticks and trays.

The first-year work in sewing which normally follows the above preliminary work is planned to teach the different stitches as follows (first with wool on Aida canvas, and later in the same sequence with white floss on checked gingham):

(1) The basting stitch, (2) running stitch, (3) half-back stitch, (4) back stitch, (5) blanket stitch, (6) cross stitch. The stitches are then given in same sequence with blue thread on muslin, and the children are then ready to make such articles as (1) needle books with wool on canvas, using all stitches; (2) button bags and dusters, using cross stitch.

The second half of the first year in sewing should include (1) basted seam, (2) seam with running stitch, (3) seam with back stitch and overcasting, (4) French seam basted, (5) French seam with running stitch, (6) French seam with back stitch, (7) hemming, (8) sewing on lace, (9) bias fold, (10) dressing dolls.

The second year work in sewing comprises (1) dressing dolls; (2) applique work on table runners, aprons, dolls' bedroom outfit; (3) outline work to make designs on bibs, table runners, and curtains.

For special classes of backward children, occupation work is suggested. Rags of either silk or wool are pulled through fine-mesh burlap with a heavy steel hook in these projects: (1) Small mats, (2) oblong square beginning a design, (3) bag with design, (4) pillow with design. The second year large rugs can be made with more difficult designs, emphasizing either the corners or the center.

The small boys who are to be our future carpenters, printers, shoemakers, and bakers can be first taught lettering by means of one-fourth inch cross-section paper and scissors. The height and width of the letters are given as a certain number of squares and the letters are cut as each step is explained by the teacher, with no previous pencil work. These cut letters are then spaced and pasted upon another paper. Then the children are ready for crayon lettering. They understand that the letters in a word must be the same height and that each letter has a given width; also, that the letters must be evenly spaced. Cross-section paper is used for crayon lettering and each letter is drawn in the same proportion as the cut letters and spaced in the same way. By this method, it is easy to work up to lettering on plain paper.

The carpenters are first taught to use the T square, the triangle, and the compass by drawing squares and decorating the squares with circular designs. The three usual views of working drawing are introduced by drawing the front, top, and side of an oblong wooden block. Each working drawing has a small perspective sketch of the object. Working drawings of small models of the different joints used in carpentry are good. Equally good are detail drawings of a model bungalow which can be built by some of the boys. In this way, the teacher can work up to different styles of architecture and of furniture.

The boys learning other trades begin lettering as outlined above and work up to the more difficult problems of their trades. Generally, they need more practice in making letters fit a given space. This can be taught by having them draw rectangles of the same length and different widths and then fitting the same word into different spaces. This gives practice also in the proper proportion and correct spacing of letters. The next steps are (1) the spacing of two words on the same line; (2) of words below each other; (3) the study of words to be made largest—e. g., in an advertisement; (4) balance of letters—e. g., on a poster; monograms painted on ivory for watch fobs; (5) different styles of letters and the best styles for different uses; (6) initial letters cut out of linoleum for printing. Boys who have had this course should have a good understanding of lettering.

Perspective is also needed, and it is best introduced through imaginative drawing; for example, pictures of what the boys have done during vacation, Indian pictures, Eskimo pictures, geography, history, and reading stories; Thanksgiving Day, Christmas Day, Easter, and the different sports which the boys play at school. The small boys, naturally, do not know it as "perspective." They are shown that objects farther away look smaller, and that circles are not always seen in their true shape. A good way for the children to get an idea of the perspective of circular objects is to have them make clay bowls and then draw a picture of them. In drawing a house, they construct one of paper first. They thus learn that the lines do not all run straight across the paper as they are apt to think they do when simply imagining a house.

The second-year pupils in perspective fold paper, and with free paper cutting make vases of different shapes and sizes. The principle of converging lines can also be taught in this year by making imaginative pictures which require paths, walks, and railroad tracks. To the older children one can explain perspective in a more technical manner. It is best to teach the simple three-line method for angular perspective. Otherwise the children are apt to become lost in a maze of technical terms. When the drawing requires people, we practice action figures, for which the children themselves pose.

The more advanced work involves the use of pen-and-ink technique. The boys practice the different kinds of lines used in ink sketches and then apply them to their pencil drawings. Color is also used. By the smaller pupils crayon is used first; later, water colors are introduced. This work is taught to girls in precisely the same manner as to boys. Hence, it will not be reexplained under this work.

Imaginative work for small girls is recommended also. Every child, and particularly the deaf child, finds use for what is called "free-hand drawing." Often it enables them to express an idea graphically for which they find themselves unequipped in vocabulary, and which would necessarily remain unexpressed otherwise. The teacher can then give the language necessary. The free-hand drawing thus serves as an aid to the vocabulary.

Costume design for girls can be introduced by making paper dolls and painting the hair in different colors as black, brown, and yellow. Colors are then chosen which look well with the different hair colors. For this work the color circle is needed. First, the primary colors are taught and then the secondary colors. The latter are developed by letting red and yellow run together to make orange, and the other primaries in like manner to make their respective secondaries. Other colors can be learned by matching samples of wool. The different colors thus learned can be used in stick-print designs and in squared designs on cross-section paper. Interesting results can also be obtained by folding squares of paper and cutting designs. These can be used as stencils by drawing them on stencil paper and painting over them.

The older girls are taught the tertiary colors and the different values and intensities. They cut dresses from the fashion plates and make drawings of them, painting their drawings afterwards in different intensities. This brings up the question as to which intensity of color is most appropriate for daytime wear, and which is best for evening use. It further involves the question of proper costumes for different occasions.

Following this work come the different color schemes. The three simpler ones can most readily be understood, i. e., neighboring or analogous, contrasted, and monochromatic. These can be worked out on costumes and also on linoleum-block designs for cloth. At this time, the different arrangements of designs for all-over patterns should be taught, such as alternate square, alternate up and down, three-position and four-position arrangement, Japanese fan, and Ogee design.

The small girls can learn the simpler arrangements by making designs for rugs, designs on boxes which they have constructed, and simple designs on curtains for a doll's house; also, by tying and dyeing pieces of cloth. The older girls can apply designs to batik work and also by painting designs on the baskets made in the basketry class. These girls need knowledge of interior decoration. This can be taught by making cut-paper posters of different rooms and dictating simple notes on the following points as they are needed: (1) Effect of color, (2) wall decorations, (3) ceilings and height of rooms, (4) woodwork, (5) floors and rugs, (6) draperies, (7) window curtains, (8) selection of furniture and styles, (9) finish and placing of furniture, (10) framing and hanging of pictures, (11) arrangement of lights, (12) arrangement of small articles. For picture study one can obtain very good penny-sized colored pictures from Brown-Robertson Co., 415 Madison Avenue, at Forty-eighth Street, New York City. Each child is given a picture to study and then required to decide on the most suitable color for mounting. The pupils mount the pictures themselves.

There are always found some children with special ability in drawing. These should receive extra time and attention. Those who show ability in cartooning need practice in action-figure drawing, facial expressions, and exaggeration of characteristics of different people. They need also more perspective drawing than the average student.

The boys who show an aptitude for illustrative drawing go more deeply into the study of the human figure. Particular attention is given to the construction of the skeleton, the shapes and sizes of the muscles, the proportions of the body; to light and shadow, color theories; and in methods of representing different textures and materials in pencil, charcoal, pen and ink, and in water colors.

For those whose special bent is toward modeling, it is advisable to commence with flat work, such as a design for a fireplace tile. This will familiarize the pupils with the medium. They are then ready for more difficult work and may model a head from a cast. Gradually they work up to making models of their classmates.

With the limited time generally allowed for each class (usually one hour a week) we can not hope to give the children a thorough course in art. Nevertheless, we can give them the simple, underlying principles and a sufficiently appreciative understanding to enable them to enjoy the beautiful around them. And for those particularly endowed or particularly ambitious we can lay a good foundation for future endeavor.

DESIGN WORK.

By Mrs. M. M. COREY, of the Montana School.

Most of us think of design as something connected with triangles; compasses, and historic ornament.

It is only in the last few years that the art world in general is beginning to realize the real nature and value of design in everyday life.

Once firmly implanted in our minds the basic principles of designs can be used not only every week, but many times every day.

Teaching deaf children design work is not a difficult task, as they receive their education through their eyes. It is largely visual education. It proves very interesting to most of the children when it is begun in the primary grades. Nature study is a treasure chest of designs.

Aim: To teach that designs often have a meaning; to show the necessity for system in a design; to illustrate how the design in an area should echo the shape of that area.

Material: Regular 9 by 12 manila drawing paper and scissors.

Procedure: Tell the children that designs have a meaning. If there is any little girl in the room who has a design on her dress, this may furnish a good example. Several examples may usually be found in the same group of children.

For instance, May has a dress with a plaid design; William has a striped design in his waist; Lillian has an embroidered flower design on her collar. The room itself may furnish material for the discussion.

The door has a design of panels; the woodwork has grooves; the desks are arranged in rows to form a design; perhaps mother has designs on her dishes at home, and in the rugs and curtains.

Say to the children, "Tell me some places where you have seen designs."

Children tell many places where they have seen designs.

Deaf children are as a rule close observers. Show them Indian-made designs in their baskets, of men, lightning, etc.

Start on some tree and leaf designs. Cut holes out to show children different ways in which the unit may be changed.

Let them cut more trees or leaves and arrange them as they wish; paste them quickly. Many of the designs they made have no unity whatsoever. They do employ the tree unit, however, so the first aim is often accomplished.

In one grade I cut a design, using the leaf unit, and asked the children if it did not have more system than their designs, if it did not look like one thing. They seemed to get the idea.

We talked about an echo. So I started a square; there should be more lines that echo the line of the square. I said I would not put round holes in the squares. Then next lesson instead of cutting out square corners, cut out round ones. Tell the children that the holes may echo the edge. If the edge says "round" the hole must echo back "round." They enjoy this. Later the children made more designs.

We discussed fitting round designs into round spaces and square designs into square spaces.

One of the best beginning problems for either the child or beginner of design is the cutting of motifs from paper.

The scissors is a tool that encourages simplicity of form and line direction. A number of simple flower shapes can be cut from circular-shaped papers and leaves cut from triangular shapes. These flowers may then be used together to form flower designs.

The great advantage of constructing designs by this method is the possibility of changing the positions of the parts until the best position is secured. The parts are then all pasted down in a final position. By using papers with a dark and light side, certain parts can be folded over after being cut, which adds another value to the design.

Design is not impossible with little folks; but each point must be emphasized in careful drill.

With the higher grades, start with simplicity—any leaf or simple bud or blossom or seed pod should be used as a commencing problem. A drawing of it as it is should be made. This should be followed by sketches of the bud or seed pod in different positions. A side view possibly will give a very different contour than a front view.

It will also be found that different blossoms from the same plant or different leaves from the same tree will show different forms, and these forms should be defined and accented in the sketch.

After these sketches have been made they can be reviewed, and the best ones selected; the guiding quality in the selection being that of pleasing measures of parts and contours or shapes of the designs as a whole.

The student must feel at complete liberty to eliminate any part that to his mind will create more beauty. The purpose of nature should always be recognized by the designer as a constant source of inspiration and suggestion toward individual expression and not as an arbitrary mistress that demands exactness and absolute picturing. Their interest is increased by observation and practice.

First make original sketches, then make finished designs in semiconventional or conventional designs for every purpose—for dresses, hats, linens, underwear, jewelry, china, beads, tiles, etc.

A consideration of lines and masses is also necessary in the designing of lamp-shades, a bag, a jeweled pin, a carved lamp, so in order to help our students to an understanding of design we must teach the theory of line as well as principles of mass.

The border patterns of Mexico and Central American ruins are examples of pure line harmonies or line rhythm.

In fact, definite divisions in securing variations in design may be listed and these are line division, form division, texture division, character division, and detail division.

How to make the children see the value of their design work: Sell your goods! I mean it in the sense of getting plainly before the public the fact that you have a marketable proposition; not necessarily in dollars and cents but in "value received."

We should say that our art departments should be practical, should function.

We believe in correlating where possible. But our tendency has been to circulate our practice between the school and the home, with only here and there a timid approach to the edge of the business world.

If art is to really function, if pupils may really practice it, and firmly believe they may, why shouldn't we boldly sell our goods in every conceivable place where drawing and design and color can play their beautiful part?

Therefore, if part of our goods is appreciation, let us sell it broadcast and not confine it exclusively to a booklet or a stencil border within the four walls of our school room.

Open the windows and doors and market this greatest of all the aims of art education in the town itself. If our goods are the principles of design, they will bring us the opportunities outside and bring a real sale to the school room.

Here is a way to do it. (Maybe it is out of place for me to suggest this.)

There is not a city or village in the country which hasn't a notion store or a hardware store or a drug store or a stationery store or a candy shop or a greenhouse. There isn't one of these stores which is not anxious to sell. In fact, they are so anxious that they run mark-down, holiday, bankrupt, midwinter, white, and innumerable other sales during the year. Right here lies the opportunity. They want to sell, so do you.

Where two energetic forces unite in a common purpose there are bound to be results. Therefore, go to Mr. Storeman and say, "I understand you are going to put on a sale of pottery next month. Now, we have at our school—I'm Miss Art Teacher, you know—a class that is studying about design and the great truths of beauty."

"We believe that beauty affords pleasurable attraction, and we believe that beautiful display cards announcing your sale will bring results. We'd like to help you, and we really think we can please you as well as your customers. Say the word, and we'll design six colored announcements for you."

Of course, being a business man, Mr. Storeman says to himself, "Now, what is she after?"

Aloud he says, "That is very nice, I am sure, but—ah-h-h—what do you charge for these?"

And you sweetly but firmly say, "Mr. Storeman, this is a business proposition, and we ask this, that you and your clerks tell your customers about the signs and give due credit to the art department of the State school for the deaf."

After a few more questions, Mr. Storeman becomes convinced that he is to get "something for nothing," and gladly accepts your proposition. But you know that his mention of your art department is the best return which you can get. You have really sold your goods.

Your work, however, does not end here. You now present a real proposition to the class with the understanding that here is no "school work," but a job. Therefore you supply the real tools of the profession—not 6 by 9 manila paper, a three-color box and a camel hair brush—but trade mediums and materials.

Then you study the problem in a professional way. Lettering, drawing, composition, color must tell the story and must be right. For it is not now a question of school work, but a question of selling goods.

And you pass or you don't—there is "no chance to make up credit."

The deaf children will find that designing is the most important part in the project. Well you work and the pupils work, and you turn the trick. You produce six creditable placards in color and the sale is a success, whether because of the school designs or not is immaterial, but you swear that it is; and the public knows about you.

But the main thing is that Mr. Storeman is pleased and you approach him again this time in a less questioning manner, for haven't you sold your goods, too? So you say, "Now, Mr. Storeman, on this next sale we haven't time to help you for our regular work is quite heavy, but can you tell us what you plan to feature two months from now?"

Of course disappointment is at first registered, but he is pleased that you will help him later, so he gives you the desired information.

Now, by approaching him in this way, you have accomplished three things:

You have given him to understand that yours is an educational institution and not a commercial house, and he likes you the better for it, for he rightly believes that the schools should not give up teaching. Then you give him a chance to see how poor his regular signs are after all, and he realizes more fully the value of art.

Also you have given the children an opportunity to see that their own work is not in vain and that they may be able to make money out of their design work.

Finally you have Mr. Storeman so firmly hooked that when you make a slight demand upon his purse he won't flop off. For when he tells you of his next sale you say, "As this is after all a business deal, I would be remiss if I did not put the proposition up to you in a straight business fashion. As a matter of fact, Mr. Storeman, we really went to a slight expense on this last sale, for we had to chip in to get the poster board and paints. Our condition on the next sale is that you furnish these materials."

Of course he is only too glad to, for it is little enough. But the big thing is that on that next lot he will take double the interest because his money is in it.

With a longer period in which to prepare for this next poster or placard problem you turn out even more creditable work, and again Mr. Storeman is greatly pleased. He has noticed the contrast between these studied productions and his own bold cards and now he wants your cooperation more than ever.

Meanwhile you have visited the bookstore and you have asked the proprietor how he liked the advertising which Mr. Storeman had been using. If he hasn't seen it, you tell him all about it and refer him to Mr. Storeman. If he has seen it, you tell him how successful it was and solicit a little work from him for the next month, and to put some of your children's best work there. It will give the whole school the opportunity to see the real value of art education, and design work especially.

Then you return to Mr. Storeman, who immediately places an order. Now your final test comes.

Up to this time you have only partially sold your goods. It is easy enough to get a little assistance, but to get a money return is quite another thing.

To his request for the next sale you reply, "Mr. Storeman, our field is purely educational. In our art department we try to train the pupils to become appreciative and intelligent consumers and we also try to discover the talented individuals."

"It is impossible for us to train properly unless we try to meet the various conditions surrounding us."

About this time Mr. Storeman awakes to the fact that his town has a real art department and there is a real teacher in charge. So you continue, "By this time I am sure that we have demonstrated our value to you. Now, there are two girls in the class who are most anxious to go to college and then go to a professional art school, but they have very little means and are afraid they can not make it. They have made placards for you and if you would offer to pay them I am sure you would be aiding a most worthy ambition on their part and at the same time they would make you your placards under my supervision and at much less cost than if purchased from an advertising concern."

Mr. Storeman jumps at the chance, and now your goods are really sold. You hurry back to those precious embryo artists and prime them for their business interview. From now on you are faced with the new but delightful experience of trying to meet the ever-increasing requests for help from the art department, to serve the art needs of the town.

For you don't end with the bookstore and Mr. Shattuck, but you work with all the stores in the community and you design counter cards, card window signs, booklets, stationery, wrapper labels, and a host of other things.

I can not refrain from writing this last word. It is not the actual money sale that counts, but rather the fact that your department can meet trade conditions and overcome them, can make the study of art a thing of value to the world at large.

MR. STEED. Next is the discussion of these papers. I think I wrote as many as 30 letters to different people in the profession, asking them to discuss these papers, and I received only one reply in the affirmative. So you see how hard it is to get any one to discuss or even to talk about art.

I want to say just a word about the exhibits before we open the discussion. The first exhibit as you enter the room is from the Missouri school, the single strip and the table.

The next strip I want to call special attention to because it might be of interest. It is done by the subnormal children in the primary department of Cresheim Hall, Mount Airy. It is done by pupils who have been placed in special classes. No pupil is placed in one of these classes until he or she has been tried in other classes and it is found that he or she is unable to do the work. One half of the day is given to handwork and the other half to written language. Among the things that you will find worked out there are different forms of sewing, weaving, rug making, and knitting. The rug that you see there is made of old stockings and old sheets.

The pupils, so far as possible, are made to feel that this work is useful, and all the work goes into some schoolroom activity.

The aim in that work has been the development of the individual child and not the production of perfect work.

To the average individual art work has been as vague as some ancient language. I think there are three reasons for this. In the first place, art work has not been definite enough; second, teachers have emphasized only the esthetic and artistic; and, third, the practical side of art has not been made important. Art appreciation, both cultural and practical, should be the aim of art work. A pupil may gain a deep and sincere appreciation of art. He may know and be keenly sensitive to the beautiful without ever gaining any proficiency in drawing. He may not be able to paint or sketch, but his course in art ought to develop a knowledge of architecture and design that will give him the same background for his judgment in things artistic that he has for this appreciation in other subjects.

All art work taught should be applied to the affairs of everyday life. It is far better to teach a child how to arrange furniture properly in his home, to get a good combination of colors for a dress, to understand the laws of design, to make a good working drawing, than to draw a rose or copy a picture.

Those who have present papers for your consideration have emphasized the fact that art work should be correlated with other subjects in the school curriculum, and that its success depends on the cultural and practical results obtained.

The question of art work is now open for discussion. I hope some of you will take part. Perhaps Mr. Menzemer will say something.

MR. H. J. MENZEMER, of the Montana school. I was unable to hear Miss Daniel's paper, owing to the confusion in the room, so I am about as badly off as Mr. Taylor was this morning.

However, I am very glad indeed to have the subject of photography discussed in the convention. I have long thought that photography offered a wide field for the deaf, not only as a profession in which to earn a livelihood but as a means of making a little additional money in the spare hours that most of us have. Aside from this, photography will, I feel sure, give a little keener appreciation of art, of the art of living, perhaps.

In our institution we have two women, one totally deaf, the other semideaf, who are doing a good deal of photography. Not only are they taking the pictures, but, as in most institutions, I presume, a great many of our youngsters have cameras and are taking pictures. As some of you may not know, we live in the mountains, and there is wonderful opportunity there to get a great many beautiful views. The youngsters go out on their hikes and picnics and take pictures; then they come back and give them to these two women, who develop them and print them.

After a youngster has gotten a picture he is always more than willing to show it, and the next thing is that he brings it around and shows it to the teachers and officers of the school. Now, when he brings one of these pictures to the art teacher she can criticize it. If it is good, she can commend it; if it is not quite as it should be perhaps, she can explain just how, if he had stood at a little different angle he would have gotten a better picture. And in that way she is going to give him a little better idea of the beauties that he will see all around him all through his life, and it can be correlated right up with his every-day living.

I thank you.

Mr. STEED. Has anyone else something to offer? I will now turn the meeting over to Doctor Hall.

Doctor HALL. Before we adjourn for the afternoon I will call your attention to the demonstration work of the morning.

Dr. E. L. La Crosse, of the Wright Oral School, will give a demonstration of auricular work to-morrow morning. I understand it will be with the children of this school, in the kindergarten room in the front of the building, from 8.30 to 9.30. The program as published originally put this demonstration Friday; we will have it on Thursday, to-morrow morning, 8.30 to 9.30.

I am very sorry to have to announce that we will not have any work by deaf blind pupils at all at this meeting. It has been quite a difficult matter to find the means and the pupils to arrange for a demonstration, so our program to-morrow will be first the demonstration of auricular work; the second lecture on psychology for teachers of the deaf, also here from 8.30 to 9.30, by Mr. Putnam, here in the assembly hall.

Then our business meeting, and then our outing with luncheon.

Please do not forget the meeting to-night, at which Dr. James Kerr Love, we hope, will be present and give us a paper on the prevention of deafness.

Is there any other business to come up this afternoon? If not, we will adjourn until this evening at 8.30 o'clock in this room.

(Whereupon, at 3.55 o'clock p. m., the convention adjourned until 8 o'clock p. m. this day.)

WEDNESDAY NIGHT SESSION.

The convention reassembled at 8 o'clock p. m., pursuant to adjournment, Dr. Percival Hall presiding.

Doctor HALL. The meeting will please come to order.

We have been looking forward for many weeks to the pleasure that we are to have to-night. While we have been coming a comparatively short distance to Belleville, Doctor Love has been coming around the world to meet us and to talk to us to-night. It is a very great pleasure indeed to introduce to you Dr. James Kerr Love, who is to talk to us on the prevention of deafness.

THE PREVENTION OF DEAFNESS.

(Illustrated by lantern slides.)

By DR. JAMES KERR LOVE.

Instead of presenting a formal address, Dr. James Kerr Love, the noted Scotch aurist, gave an illustrated talk upon the prevention of deafness. Doctor Love showed a great number of lantern slides illustrating the anatomy of the ear, the function of each part of the ear employed in hearing, and the parts involved in both adventitious and hereditary deafness. He also exhibited diagrams to prove that deafness had become hereditary in certain families.

Without these illustrations it is impossible to give a full account of Doctor Love's address. The following are a few excerpts:

Hereditary deafness has been with us as far as we know from the earliest times and one need not expect it to disappear through ordinary education or other means of correction.

According to Mendelism it should be expected that deaf born children would usually have hearing parents and hearing members of deaf fraternities must often have deaf children.

Doctor Love placed a ban on cousin marriages both for the deaf and the hearing, on marriages between people born deaf, between deaf born and hearing members of deaf families, and between hearing members of deaf fraternities.

Doctor HALL. I am going to ask Doctor Love if he will be willing to answer any questions that you may wish to ask on this subject.

Doctor LOVE. Oh, yes; surely.

Doctor HALL. Does anyone here care to propound any questions to Doctor Love on this very important matter?

I am sure you will all join me in a rising vote of thanks to Doctor Love for his very interesting lecture.

(The convention rose with great applause.)

Doctor Coughlin hopes to give us a short moving-picture show, and after that we will announce one or two other matters in regard to the program.

We are now going to have the pleasure of listening to a vocal solo by Doctor Hafner.

(Vocal solos were sung by Doctor Hafner and Miss Bawden.)

Doctor Love wants to say another word to us.

Doctor LOVE. I was going to say that I was so full of the subject of the prevention of hereditary deafness that I forgot to tell you in a word that acquired deafness can be prevented. I ought to have told you about that first.

The prevention of acquired deafness is the prevention of the infectious diseases which cause deafness, and the treatment of the nasal pharynx, from which deafness nearly always proceeds, especially the treatment of the child's tonsils and adenoids.

I would not have broken into your program for a trifle, but this is an essential matter and I apologize for having forgotten that. I wish

to tell you that the reason was that my mind was so fixed on what I believed was the principal part of my lecture that I did not think of that at all.

I thank you for letting me make this additional statement.

Mr. F. W. BOOTH, of Omaha, Nebr. I should like to ask the question whether acquired deafness is decreasing with the progress of medical science?

Doctor LOVE. Acquired deafness undoubtedly is diminishing, and diminishing pretty rapidly. On the other hand, however, you have coming from the schools for the hearing into the schools for the deaf a class of children who used to be left in the schools for the hearing, the hard-of-hearing children and the semideaf children. So that on the surface of it you would think acquired deafness was not diminishing, but if you look into the statistics and the kind of cases being admitted, and also look into the nature of the cases that are now being admitted into the schools, where schools exist for the hard of hearing, you will find that acquired deafness is certainly diminishing, with the improvement in the treatment of the nasal pharynx, the back of the nose and the back of the throat, and with the better control of such diseases as scarlet fever, measles, and meningitis. Society is committed to the extinction of all those infectious diseases, so far as that is possible, and we have no doubt that it is possible to a very great extent.

Doctor HALL. We will now have a vocal solo by Mr. Harold Barrett.

(A delightful concert then followed, solos being given by Mr. Harold Barrett, Mrs. Wilmott, Mr. James Booth, Miss Bawden, and others.)

The meeting will now adjourn until to-morrow morning.

(Whereupon, at 10.15 o'clock p. m., the convention adjourned until 9.30 a. m. to-morrow, Thursday, June 28, 1923.)

FOURTH DAY, THURSDAY, JUNE 28, 1923.

PROGRAM.

8.30 to 9.30 a. m.:

Demonstration of auricular work. Dr. E. L. La Crosse, Wright Oral School, kindergarten room.

Lecture II "Psychology for the teachers of the deaf," Mr. George H. Putnam, Illinois school, assembly hall.

9.30 to 10.30 a. m.:

Business meeting, Doctor Hall presiding.

Announcements.

Paper, "The deaf and the automobile," Dr. J. S. Long.

Report of treasurer.

Report of the executive committee.

Appointment of committee on resolutions.

Election of officers.

10.30 a. m.:

Outing, with luncheon.

8 p. m.:

Dancing and cards.

An informal meeting of teachers who are members of the American Association to Promote the Teaching of Speech to the Deaf may be called during the evening to discuss future plans.

MORNING SESSION.

The convention reassembled at 9.30 o'clock a. m., Dr. Percival Hall presiding.

PSYCHOLOGICAL STUDY OF PRINCIPLES.

By GEORGE H. PUTNAM, Illinois School.

"I wish I had known. Why didn't somebody tell me?" Have you ever heard anyone say that? A business man in the midst of failure and realizing the cause said, "I heard that principle years ago, but I didn't understand. Now I'm going to use it." "How often have I told you?" says the mother and the teacher. Yes, but the truth is, this matter of good advice which flies about us constantly in great flocks, this knowledge we wish we had used as well as known, did not awaken a realizing sense; it didn't register as law. Recently a friend just escaped the grave and the cause was an unwisely selected diet. "I could have told you how to have avoided this illness, but would you have paid any attention to it?" I asked. "No," he said, "I don't believe I would." We have to stand on a coffin to see with the eyes of realization, or we must be trained in thinking according to psychological principles. We study physiology and hygiene, but we don't listen till pain begins to talk. We don't obey till nature begins to collect through doctors and nurses. Still I have seen boys and girls become interested in discussions and demonstrations of these vital principles of life when it was presented vividly and clearly as law.

Something is needed in our instruction to cause belief, to arouse inspiration and decision. We must see the light on the road to Damascus. Still, I wish that I had been taught in early years about the mind and its workings, the power of the mind over the body, its power in building or destroying itself; about the subconscious and how to train it, that, as Coué says, the imagination is often stronger than will power, and why. I believe it is until you train the will to control the imagination, which is possible. I wish my teachers had required less learning and a more strenuous pursuit of definite ends, less memorizing and more training in the power to hunt down vital principles and apply them. Psychology finds the better way. There is no deep magic—just practical ways of clear visualization, arousing intense feeling and making vivid impressions, a rational method of repetition, and always requiring some application. I wish some real teacher had given me with a realizing sense the meaning of law in the spiritual world as absolute as in the natural world. Is the golden rule a law? Does giving more than you receive bring its reward? Is there a law of compensation in the spiritual world? Is hate really a boomerang? I believe there is opportunity for clear demonstration; for laboratory methods; for a convincing vitalization of the great questions of life. The pupil may know and still go wrong, unless we do something to stimulate and carry on the art side of life. Work is still needed to make a better world, as well as to fix character and personality.

In an address to our teachers a few weeks ago Superintendent Shafer, of the Jacksonville schools, lamented the tendency of teachers to emphasize their specialties to the exclusion of all other departments and urged correlation and especially instruction and training directed to productive citizenship; and productive citizenship can be nothing more than the individual efficiently trained for service and a realization of the law that service to society is as necessary to individual development as it is to human progress. My thought is that our schools should go directly to the fountain head, but I have searched the United States for high schools that have a teacher of psychology and some one who is responsible for specialized mental training. Boys and girls are not exercised on the principles of mind or the great principles of living; they are not even taught how to study. The student must get his lessons, but rarely is it the concern of the teacher how he gets them. One illustration will show the trend in most of the public schools and colleges. The coach was receiving a salary of \$12,000, while teachers of Latin, history, and mathematics only \$3,000. I hope I am mentioning this point with no feeling of envy at the seeming lack of proportion in this scheme of things.

I have been a coach and am still a scout master and I realize something of the high value in training of this kind. It is applied psychology in a high degree. The teacher is not concerned as to how the student gets a lesson, but the coach must get 100 per cent action, and he must know how—a rare combination of physiology and psychology. The psychology of the game as it is in war, as it

is in life, is a question of morale. I am not criticizing this work—I believe in it. But I feel that there is a field in mental training much more vital, much more essential to our efficient life that should be proportionately cultivated. Two little incidents set my mind in this direction. I read a brief article in one of the magazines under the caption "They are not taught in our schools," and found there enumerated about everything that is needed to succeed in life. Psychology has treated of abstract principles, but rarely has it been applied to the development of power, first in thinking and second in expression. In the concluding chapter of our textbook on natural history, man is introduced as "the head of the animal kingdom * * * with mental and moral faculties capable of the highest cultivation." But nowhere in our courses is there a specialized treatment of this human animal accorded the importance that is given to the simple study of natural history. The parts of a grasshopper are more important than the working of the subconscious mind. So I believe our schools need not only a mental coach, but that every teacher should be a master of applied psychology, for development should be continuous, and every stage in the process needs the guiding hand of the mental trainer.

"Get your principles right; the rest is a matter of detail," said Napoleon. Character is built upon principles. Life is governed by principles. The mind of one who deals simply in facts is weak and chaotic. It is the mastery of principles that brings power. Our first work is to gather the raw materials of education—sensations, images, groups of similar images which we call concepts, and thinking which begins with ideas or judgments expressed by joining concepts or concepts with images. Elephants are strong. Heat causes expansion. Mary is intelligent. A large part of our work is given to this accumulation of simple facts. Education really begins, however, when we understand principles and use them in construction. The material facts are everywhere in evidence, but the great forces and the great principles of living we can not see. Behind everything is a how and why. Every effect has a cause. Our aim is to see the law or principle as distinct from the externals. The eye looks upon the hive—the mind's eye sees community life, honey as the reward of work, the sting as the consequence of molestation. Wrapped up in matter are the principles of life, attraction and chemical affinity. Many of the mysteries of spiritual man we can not see and we can not explain, but we may learn to control and use. These principles include the conservation of energy, action and reaction in matter and mind, the principles of law, cause and effect, of truth, of beauty, of good.

The development of the individual has been emphasized. Of equal importance are the relations of the individual to society and his preparation for a life of service. Our scheme of education must give knowledge and training in the means by which these ideals are to be attained. To grasp a principle is to hold the key to many a hard lesson and the solution of many a difficult problem. Almost everyone at some point in his education has been baffled by the problem of falling bodies when learning that the earth is round. Why don't people and bodies on the other side fall off? We need only the principle of gravitation to solve this problem. Variations in the animal kingdom no longer puzzle us when we realize the principle of growth and adaptation. So in all stories and all our material we seek a principle, then we apply it as an exercise and a test of realization. I give: A saloon keeper was standing at the door of his saloon when a young man passed. "Come in," said he to the young man, "and have a glass of wine. It's my treat." And a pupil writes, "The saloon keeper is like a farmer. He has a selfish motive, and like the farmer wants to get more money. So he plants the seed of appetite."

A man met a little girl on the sidewalk and said, "Little girl, do you like candy?" "Yes, indeed, I do," replied the little girl. "Come with me to the store and I'll buy you a big bag full." And the little girl did not go home that night. The man was a human wolf. We call him a kidnaper. I hardly need to state the popular story which suggested this analogy.

Here is a little story to illustrate concentration: "Once there was a hen that never laid two eggs in the same place. All went well till she wanted to sit. Then in her frantic efforts to cover them all the hen went crazy." We have many occasions to make an application of this lesson. Do we realize the value of a wisely chosen illustration to make the lesson vital, to aid us in demonstrating principles? This was the method of the Master Teacher, and we can not improve upon it, except to hunt up live stuff with a modern application. An illustration from your back yard is worth 10 from Palestine or India. A comparison to some happening in your own school is worth all the similes of Shakespeare.

"Why, I've been teaching lessons like this." I hear some one say. And if you have developed them with psychological clearness you raised your point of

view so high that you saw a dozen new lessons that you never had time to teach. Pass the good work along and let us know your vitalizing methods, how you detach a principle from its external setting, how you develop and use the constructive, how you get response on the art side.

I received something like a shock a few weeks ago in making a test of our higher grades. I had thought I could use in my chapel lectures allusions that would carry with force the idea of character types. I thought I could mention Napoleon and Wellington, Esther and Joseph, Franklin and Florence Nightingale, Cinderella, and Shylock with the force of a concept. But I found that while many facts could be given on 50 of our most commonly known types, the dominant characteristic had not registered. The one or a few little things which make these names significant had not been impressed—that is, principle had not been the aim of instruction.

I would like to mention one or two examples. What would it be worth to many a child for him to realize the principle in the little story of Washington's apology to Colonel Payne, and a little training to form the habit of overcoming pride and offering the sincere apology when he is clearly in the wrong? Of the story of Nellie, who, when a swarm of bees lighted on her head and shoulders remained perfectly calm till her father came and put them into a hive? The applications of this principle may be made quite interesting. What would it be worth to some one you know to have been given a lesson on our positive reactions to suggestion?

I was once walking along behind a bent and slouching man, when I suddenly realized I was unconsciously imitating him. I straightened up with a jerk and began thinking. Why not profit by every such suggestion to keep my own form erect? Why not apply the principle to all forms of suggestion? Why not form the habit of meeting every suggestion with a challenge and react consciously for my own improvement? It is a habit easily formed. It can easily be put into a game in the schoolroom. I wish I had been taught such a lesson before I became set in my ways. There's a great lesson in the story of Columbus. Let's get the heart of it and junk most of the details if it will help to hold on to principles. Perhaps no lesson has developed better results than one on the value of cheerfulness, because it led to exercises in observation, experiment, history, biography, and the scientific explanation of how a simple attitude of mind relieves nerve tension. I imagine some one saying "Why, this is not psychology. It's just teaching how to live." I am perfectly willing to admit half of it. It reminds me of the Great Teacher who came that we might have more abundant life.

In our search for principles and use of the analogy we are constantly making use of inference. This is one of the most common operations of the mind, and the broader our experience and the narrower our jump from what we know to the conclusion the less liable we are to make mistakes. It is one of the natural operations of the child mind. I remember one of my experiences. The little daughter of one of the teachers was standing beside me at a ball game. A batted ball came our way and I did my best to intercept it, but missed, and it struck the little girl's leg. She uttered a cry and said, "Mr. Putnam kicked me." Not seeing the ball, she based her inference on previous kicks and ascribed it to me because I was nearest to her. "Fish! Fish!" cried a little boy on throwing his line into the water, expecting them to come to his call just as his rabbits did. Experience is needed and care to get all the facts accurately.

Problems are met at every stage of the lesson, problems of motives; our own, which should be carefully analyzed and revised as new principles become known; the motives of others, so that we may judge of their conduct and learn how to adapt ourselves. Here is an instance that illustrates a very common situation. A class studying about Washington's trip to the French commander was asked to write Governor Dinwiddie's message. The teacher protested, saying she never taught anything like that. But to me it seemed a logical problem for a pupil to undertake. He ought to be able to write "Get off our land or there'll be war," and then be led to a nearer approach to diplomatic style with the reasons for the demand. Learning facts of this nature without solving any of its problems accomplishes very little in the way of education or developing power. We should constantly discuss problems, both those that are suggested by the lesson and real problems brought in by the pupils, which are studied and judgment given in comparison with the principles previously mastered. The value of having these problems discussed without prejudice or emotional excitement is very great, for it lays a foundation in the subconscious mind and may be used as a strong lever to influence pupils in regard to their own conduct, when feeling tends to warp their judgment.

Education is serious business and it ought to be. It should be carried on in all earnestness. But do we not as a general thing take it too seriously? Everyone knows what happens when the great machine grinds on without the constant drop of oil. There are many among teachers, really great machines, who grind on in this unwise manner, looking upon humor as an interruption, an annoyance, an infraction of discipline. There are some who welcome fun for the pure joy that it brings, for the relief it gives to overwrought nerves, and as the pendulum swings back for the returning zest in the more serious work. With this latter class I am in hearty sympathy. My first years in the schoolroom were characterized by this dead earnestness. Now, if the lesson itself or circumstances do not furnish a bit of humor often enough I lug it in bodily. It is difficult to maintain a grouch among those who laugh together and where wholesome laughter abounds it is impossible to breed a grouch. One of the conditions of effective study is the mind in poise. The mind disturbed or nerves on edge from approaching exhaustion may be quickly relieved by a bit of humor. Probably no one understood this better than Lincoln, the most earnest of men. Carrying burdens greater than ever fell upon human shoulders, his enjoyment of humor was characteristic and his use of it a beneficent philosophy.

If it can be demonstrated that more of the serious work in school can be done when mind and nerves are put in order by the occasional use of humor it would amply justify itself, but if in addition it can be shown that fun and philosophy have a psychological connection, that it gives a valuable training, that when we see the incongruous we are also given an understanding of the congruous, that when we laugh at things as they are we also get a vision of things as they ought to be, we have found not only a lubricant of undoubted value, but also an instrument worthy of a place in education. "You'll be a fine woman when you've laughed a little," said one woman to a younger one in a recent story, and there is more wisdom in the suggestion than most of us imagine. "If you love me," says Dr. Frank Crane, "cultivate a sense of humor." And I might add, "If you love yourself or your pupils, cultivate a sense of humor." It is worth while for itself, but every time we produce humor we shall see the idea, like a magnet polarized, with humor at one end and philosophy at the other.

In my first month of teaching I stumbled on the principle of analogy as one of the essential tests and methods of training; that is, to refer one event or story to another previously learned or to create a new story to illustrate the principle as a test of understanding as well as sound training of the creative imagination.

Drawing came naturally as a method to teach pupils not only to see things as they are, but to look into them for principles, to see the pictures in words—the foundation of the art of illustrating. Finally came the combination of these two principles in the cartoon, the principle of analogy brought out in a picture. The illustrator does the hardest kind of study, for words must bring pictures to his imagination. The cartoonist must do a double portion of study, for the pictures must be applied to a new setting and illustrate new circumstances or conditions, and in many instances they are invaluable because they present clear solutions.

That is a simple cartoon. It may be a seed. We must plant seeds if we expect to gather crops. The same principle applies to our little exercises in conversation. It may be the beginning of a dramatist or a novelist. And our solutions of problems forecast the executive or the inventor. But at every stage they are natural exercises in mental training of problems. As a basis for language work I have found nothing more interesting or suggestive. It is valuable chiefly for current events, but every field may be covered by a judicious selection. Our work with cartoons leads us to a study of the source or principle on which it is based, then to trace the likeness in the new application. Many of our pupils develop originality along this line quite rapidly after they have once grasped the idea. You might start quite early. Tell your pupils to draw a boy pulling a cat's tail, then to make the cat say something. Pictures have proved one of the strongest aids to memory, but cartoons are especially valuable because they depend for their effectiveness on the association of analogy.

In all this work the imagination has been given exercise in training. No treatment of psychology should omit the imagination. No system of education is complete that does not emphasize this great building force. There can be no true education without it. Imagination rules the world, and so it does the individual life. Life may be a work of art, or a mere life extension of drudgery. No one can watch the normal child without being impressed with the activity of the imagination, and no one can escape the conviction that it is the great mind builder. The child's attitude is essentially constructive, even if it has to be destructive to accomplish its purposes. Our problem is to insure the child's

joy in the imagination and not destroy its power by the dead processes of memorizing. The imagination builds only from the raw materials which have been presented to the mind. Care therefore is necessary to keep these materials sane and wholesome. The stuff we feed the mind should present principles he can use in constructing a balanced life.

Much that I have suggested provides motor activity in thinking, but doing is also essential. "No reception, without reaction; no impression without correlative expression," is the law. Learning is but gathering materials for construction. Our problem is one of direction, or often of transmutation; that is, turning the idea, feeling, or impulse to effective use. You can use materials to think and act on the plane in which you happen to be and become like it, or you can construct ideals and transform your environment accordingly. We have opportunity within the limits of the schoolroom for little action—the building up of the art side of education. Actions, the drama, working ideas into something are always effective. I have but one other suggestion—that report cards be provided, so that pupils may be encouraged to put in practice some of the principles developed in the schoolroom. A statement of the principle such as, sit erect, punctuality, thoroughness, kindness, superstition, etc., with spaces for check marks, the record being left entirely to the pupil himself. Detailed written reports will be found interesting and profitable in developing language exercises in many cases.

During the past year I have had a class in applied psychology. The pupils were interested every minute of the time and responded both in thinking and doing in a way that convinced me this specialized study of mind, life, and personality deserves a place in our course. It opened up a field of exercises in language that is very much needed. Centering on principles has been of special benefit in unifying instruction and also in making clear the many facts learned in previous instruction.

Constructive exercises formed a large part of the work. Score cards were used for judging personality, character, and principles. Resolutions were freely made. Of course there will be lapses—that is to be expected. But the seed is planted in the subconscious—that is all we can do; to do otherwise is to leave the youth a victim to impulsive action. You may not get the ordinary boy to leave cigarettes entirely alone, but you will give his mind a start toward moderation and the importance of self-mastery. There was no effort at preaching or overruling—simply cold laboratory methods applied to human nature, with an effort to stimulate feeling from the understanding, not to force it from without, feeling sure that the influences will not be lost.

So many of my thoughts in these talks have been suggested by the work done in this class that I will not take your time by going into further details. One thing that impressed me forcibly was the need of giving seed thoughts time to grow. We are doing too much piecework, trying to cover too much ground, and digest too many textbooks. Are we not trying to hatch eggs by boiling them? We turn too large a stream into the puddle of the mind and it becomes turbid, while if we added the water drop by drop its clearness would not be disturbed. Our tests and examinations call for a quantity output and ignore quality of thought, the sense of proportion, and appreciation of life's values. There is nothing new under the sun. I have nothing new to give you. Psychology is not new. But I wish these age-old teachings had been taught me in such a way that the principle and the law had been made plain and so clearly that I would have believed. In an age of "push the button" we are losing our power to think. But I believe psychology has a mission, that the principles it teaches are needed in our work. For the teacher the vital thing is progress—the living stream. This is the only defense against the dead line. Whatever line of study you take up psychology should be the running mate.

In 95 per cent of all occupations there will be found the following dominant qualities necessary for success—construction ability, reason, form, attention, language, memory, executive ability, and personality. Boiled down we find five elemental qualities—the constructive imagination, reason, concentration, language, and memory. These are essential to success in business life. They are just as necessary in social and public life. They form the sum and substance of psychology. Language may after all be the chief aim because it is the instrument of expression—but both the parrot and the philosopher use language. So if we teach our pupils to think we put life and power into language; if we teach them to imagine we have given them the power to build; if we teach them to act we have given them the power to enjoy. We as teachers need a broad outlook; we need to see the beginning as well as the end; we need to understand the processes as well as the forms of education.

The home as an influence is not what it used to be, and teachers are the only hope of a better world. And in their faith lies our happiness. A gentleman was visiting a lady who was teaching in one of the slum districts. Noticing a little dirty freckle-faced boy he remarked dryly, "I suppose you have high ideals for this little fellow." "Well," she replied, "the first thing is to wipe his nose." So this is our problem—to wipe their noses, then to teach them to do it when we tell them, then to do it without being told. So we go from one ideal to another of more and more importance. We climb one by one the mount of ideals, which is of far greater value than to name all the mountains of Eurasia.

So to me psychology is the most practical thing in the world. It helps us to do what we want to do and get what we want to get. It teaches us to generate power, to direct it to a certain end to raise our rate of vibration and increase our faith. And in conclusion let us in our teaching try to impress the absoluteness of law and principle. They are not kind, they are not cruel, they can not be bribed; they just act. And wisdom is in knowing the law and the principle and adapting our course to use them. It means building a philosophy of life, with language the instrument, thought the creator, and psychology as the science and art of application to right living.

Doctor HALL. The meeting will please come to order. The business session will now begin.

I am going to call on Doctor Long for a short paper in regard to the deaf and the automobile. Our deaf friends in a number of States have been deprived of the right to drive automobiles. They are very much worked up about this interference with what they believe—and I think they are correct—their right to use the public highways. They are very anxious to obtain the support of this body of teachers, who know them well and know that they are careful drivers, in their fight for equal privileges with others. They do not ask that they have any special privileges, but simply equal privileges with other people; that they be allowed to pass the usual tests for drivers and have the right to use automobiles.

This paper will be followed by a resolution which you will be asked to act on later.

Doctor LONG. My name appears on the program as the author of this paper, but I do not claim any credit for having written it. The credit belongs to Mr. Beadell, chairman of the committee on the national association to look after national automobile legislation in the country. It was he who wrote the paper, sent it to me, and asked me to sign it for him.

THE DEAF AND THE AUTOMOBILE.

By W. W. BEADELL, Arlington, N. J.

Mr. President and ladies and gentlemen of the convention, late on the evening of August 15, 1915, Charles H. Over, a deaf-mute, aged 20, residing with his grandfather at the latter's summer home in Asbury Park, N. J., was driving the family limousine slowly along brilliantly lighted Kingsley Street. Being mid-season at the popular summer resort, many people were abroad at the hour and witnessed an accident involving the young motorist. Consequently the facts as to the occurrence were well established at the police court hearing next morning. At the First Avenue crossing of Kingsley Street, Y. Kawashima, a Japanese boardwalk employee, stood on the street-car tracks conversing with a friend. As the automobile approached he left his companion and started for the sidewalk. Had he kept on he would have made it safely; but as often happens in such cases he became panic stricken when he caught a glimpse of the oncoming car and darted back into its path. Young Over applied the brakes promptly, but the heavy car slid into the pedestrian and threw him forward to the pavement. Later, at the hospital where the injured man was taken in a passing jitney, some bruises, cuts, and the loss of an ear were itemized as the extent of the hurts.

The family home of the Overs was on Riverside Drive, New York, and it was there that Charles had learned to operate a car. He had held New Jersey licenses for two years, the first having been granted by Commissioner Lippincot after the grandfather had visited Trenton and explained to the commissioner something of the advantages of deafness in driving a car known to all familiar with persons thus afflicted.

Four months before this accident occurred there had been a change in the motor-vehicle department. A new head was appointed, a man whose experience for the position had been derived from serving as secretary of a mayor, board of fire and police commissioners, taxpayers' association, and finally as secretary of the State senate for one year. When, four days later, he received the report of the Asbury Park incident, he summarily revoked young Over's license and declared that it was done "on the ground that a deaf-mute was not competent to operate an automobile." He expressed great surprise that a license should have been issued to a deaf-mute and started an investigation to ascertain how such an extraordinary mistake could have come about. He admitted that there was no law against it, but declared that so long as he remained in office no licenses should be issued to persons who are deaf.

I have gone thus into detail because I have found the case to be typical of others where the deaf are excluded from the enjoyment of their constitutional right to use the roads for the maintenance and construction of which they are taxed. Investigation shows that where such restrictions exist they have in nearly every instance been brought about by single accidents in which the deafness of the driver was not remotely involved. Thus, the special law of Pennsylvania was the result of a deaf motorcyclist running down a child—just such a happening as occurs every day in many cities, the child running in front of the machine in happy disregard of consequences. In the District of Columbia the deaf were refused licenses because an aged colored woman stepped from the curb in the middle of a block directly into the path of a slowly driven car, the operator happening to be deaf.

Maryland is the only other State where exclusion is practiced, so far as I have been able to ascertain. Statements made by the commissioner of that State and his assistant indicate that they have been influenced by the commissioner of New Jersey. Two years ago the latter was instrumental in organizing the conference of motor-vehicle administrators, its membership now including the motor officials of all the Eastern States from Maine south to Maryland, with the exception of Rhode Island and Delaware, and the addition of Ohio. The conference meets quarterly at the various State capitals for the discussion of matters pertaining to uniformity of enforcement of laws and improvement of traffic regulation. A year ago the New Jersey commissioner submitted to the conference a resolution relating to physical infirmities in which it is declared to be the unanimous opinion of the members that a law should be passed in each State "requiring an extraordinary supervision in issuing licenses to persons with physical infirmities," including deafness. An added paragraph proposes that such a law give the right to the authorities to revoke or suspend licenses already issued "and to require a medical or other satisfactory certificate from any operator or applicant before granting operators' licenses."

Six months later the commissioner who introduced this resolution described it to me as "calling for the enactment of a uniform licensing law with a prohibition against the issuance of any licenses, conditional or otherwise, to applicants with defective hearing or impaired vision." And the office of the Maryland commissioner, shortly after the passage of the resolution, refused licenses to the deaf on the ground that the conference members had unanimously agreed to take this course toward deaf persons and that he felt bound by this agreement.

None of the other administrators have so wantonly distorted the intention of the resolution. With the exception of Pennsylvania, New Jersey, and Maryland, all of the 10 States party to the resolution issue licenses to deaf drivers, and nowhere else in the United States is their right to drive cars questioned to the extent of their complete exclusion. In the District of Columbia some 20 or more drivers receive their annual renewals of permits, only new applicants being refused. Even these, if they maintain voting residences in other States, can secure licenses at home and drive in the District under the reciprocity agreements.

I need not present to you the arguments in favor of the deaf motorist. Psychology has been too large a part of the training of your profession for you to have overlooked the compensatory features of deafness as applied to driving a motor vehicle. One commissioner could think only of the dangers of railroad crossings in connection with issuing licenses to deaf persons. It was pointed out

to him that a person who learned of the approach of a locomotive only by looking up and down the tracks was not likely to change the habits of a lifetime simply because he happened to be behind the wheel of a car; whereas a person who customarily depended upon his hearing for that information might, because of the noise of his motor, easily be caught on a crossing. There have been an excessive number of crossing accidents involving moving vans. It seems indisputable that in the great majority of cases these are due to the roaring of the heavy motors, supplemented by the characteristically drumming sound of the inclosed bodies of the vehicles, drowning out the noise of the approaching trains. The drivers are not trained to use their eyes where ordinarily their hearing warns them.

Some of those opposed to the deaf autoist have spoken of him as a menace to other drivers. Pinned down to a statement of the exact circumstances under which this would prove true nothing unanswerable is forthcoming. Everywhere the futility of sound signaling is being confessed by the substitution of the visual. In congested traffic "stop" and "go" standards are rapidly displacing all other means of signaling. On Fifth Avenue, New York, the most congested street in the country, signal towers with colored lights have guided traffic for several years. It is interesting to note, in this connection, that only one casualty occurred on the avenue last year, while on Broadway, which reaches the full length of Manhattan Island and where burly policemen with waving arms give the signals to the second heaviest traffic in New York, only two casualties happened during the same period of time.

One of the most painstaking experimenters and students among the commissioners—one whose intelligent handling of the subject of the deaf motorist has commanded my admiration and respect—writes me that in his opinion the future will show but one demand for the auto horn—that of warning a pedestrian ahead. And, singularly enough, a friend who has driven cars for many years assures me that he avoids using his horn as much as possible under just those circumstances, preferring to steer around such pedestrians rather than startle them into a dodging panic by sounding his horn.

Life and casualty insurance companies are governed by no sentiment in the transaction of their business. If they believed the deaf motorist a hazard, nothing would prevent them from indicating the fact in their rating cards. Yet the national rating office for all the larger casualty companies informs me that they have never sent out orders for extra premiums in the case of deaf drivers and know of no instances of such discrimination. The statistician of the Metropolitan Life Insurance Co., who also is chairman of the public safety section of the National Safety Council, writes me as follows:

"The indication is that false conclusions are being drawn at the present time in connection with deaf drivers of automobiles. * * * I am quite willing to say to you that I have not seen any figures which I could consider trustworthy indicating that deafness was a serious factor in increasing the hazard from driving an automobile."

The editor of the *Safety News*, organ of the National Safety Council, describes to me his conception of "a safe driver and one to be patterned after" as one who depends exclusively upon his eyesight under all circumstances of motoring.

The increase of motor accidents throughout the country is causing the greatest alarm. Every means of reducing it will be seized upon by the authorities. Snap judgments by those whom the law places in a position to make decisions will sooner or later rest on the deaf driver of one or another of the States now free from discrimination of this class. What can be done to prevent this? The presentation to the commissioner of Pennsylvania of the opinions of a number of superintendents of schools for the deaf caused him to remark that "the deaf have the weight of expert opinion on their side," and he is now sponsoring an amendment to the laws in that State which practically will nullify the prohibition of a previous law. The directors of the American Association to Promote the Teaching of Speech to the Deaf have passed strong resolutions in protest against depriving the deaf of their right to drive cars. What would not be the effect of the adoption of a like resolution by so representative a body as the Convention of American Instructors, with the transmission of official copies to the motor-vehicle administrators of each of the more populous States?

Doctor HALL. I wish to say that Doctor Long will submit a resolution which we will refer to the committee on resolutions a little later, asking for your support of deaf people in their fight for their right to drive automobiles.

I now would like to ask Mr. Gemmill, of the State Board of Education of Iowa, to come to the platform. He has something interesting to say to you.

Mr. W. H. GEMMILL of Iowa. Members of the convention, I know everyone has had a very delightful time here, and I know that you want to have a delightful time at the next meeting, wherever it may be held. My purpose this morning is to tender to you on behalf of the Governor of the State of Iowa, the members of the State board of education, the Iowa School for the Deaf, Superintendent Gruver and members of the faculty, the citizens of the State, particularly those of Council Bluffs, including the various commercial organizations of that city, the most cordial invitation that I know how to express for you to come to Council Bluffs for the next meeting, which I believe will be the twenty-fourth convention of this organization.

Council Bluffs, as you know, is located near the southwestern part of the State of Iowa, on the Missouri River. Council Bluffs is on the east side, and directly across is Omaha. The Iowa school is located about two miles a little southeast of the central or business part of the city, connected with the city by a splendid street-car line, and with Omaha across the river. There are splendid transportation facilities between the two cities, and in Omaha is located the Nebraska School for the Deaf, over which your friend Superintendent Booth presides.

All of the leading transcontinental lines, with one or two exceptions, center in those two cities. The Northwestern system, which, as you know, is a great system from Chicago west, passes through Council Bluffs, and various lines radiate, particularly to the north into Minnesota and the Dakotas, northwest into Nebraska, and farther westward.

Then we have the Milwaukee system from Chicago to the coast, we have the Burlington system from Chicago to the coast, the Illinois Central system from Chicago to Council Bluffs, and various smaller lines connected with that system. We have the Wabash from the Southeast; the Great Western from Chicago, from the Northeast, St. Paul, Minneapolis, and those points; the Rock Island system from Chicago and from the great Southwest, which touches, as you know, Kansas City, El Paso, and the important cities of Arizona, New Mexico, and southern California. Then from the West we have the Union Pacific and the subsidiary lines. In fact, almost all of the great roads center in those two cities.

In so far as transportation is concerned, very few cities in the United States can excel those two as a center, because we can come in from all points—north, east, south, and west—on main lines.

Council Bluffs is located on a great river. It is located in the central part of that great Mississippi Valley region, a wonderful agricultural country.

Omaha and Council Bluffs together constitute really a very large center of population as well as an industrial center.

Now, if you will accept our invitation, which is an urgent one, coming as it does from the various sources of government officially and from the citizens of the State, we will do everything we can to entertain you royally, and to show you the best time that Iowa can show anyone. We have entertained some of the great associations in the State. I happened to be in Des Moines three years ago when

we took care of the Methodist Quadrennial Convention, which is a very large affair. The same year, beginning about the 1st of July, we entertained the National Education Association, which, as you know, is the greatest educational organization on this continent.

Then, only two years ago, we entertained that great fraternity which recently met in Washington, the Shriners. We had thousands upon thousands of them there, and I believe that I can truthfully say that the representatives of all of these great organizations voted Iowa a great State and its people royal entertainers.

Now, we would like to have you come to Council Bluffs. Superintendent Gruver is very anxious that you should do so, and so is the board with which I am connected.

I do not know of anything more that I can say to express our real wish for you to come to Iowa, and I hope that you can accept this invitation and be with us at the next meeting.

I thank you.

Mr. F. W. BOOTH, of Omaha, Nebr. On behalf of the Nebraska school for the deaf, as its superintendent, I desire to most heartily and cordially second this invitation that comes to you from the Iowa school and the Iowa board.

Mr. E. McK. GOODWIN, Mr. President, I have attended every convention since 1886. We have met in various quarters of the continent, of the United States, and now in Canada. I move that we accept the invitation of Iowa.

Dr. A. H. WALKER, of Florida. Mr. President, this invitation just extended by Mr. Gemmill for this organization to meet in Council Bluffs is too warm for us to handle at this time. I therefore make the motion that it be referred to the executive committee and left entirely at their disposal to accept or to reject as they may see fit. It is not a wise thing for this association to fully determine right now that it shall meet in Council Bluffs. Something may come up within the next year or two—or next month—that perhaps might change the situation to a great extent, and I think—not that I am opposed to going to Council Bluffs, it is a delightful place and I think we all want to go there—but I think the best way would be to leave the decision entirely in the hands of the executive committee to determine at a later date. So I make that as a substitute motion to the motion of Mr. Goodwin.

Dr. HARRIS TAYLOR, Mr. President, I move an amendment to the substitute to the motion by Mr. Walker—Doctor Walker—well, I keep forgetting you are a doctor. [Laughter.]

I am in favor of Iowa, and I move this: We can very readily see the circumstances that may arise which would prevent or deter the association from accepting this invitation later or make it desirable to change it. Therefore I would suggest the amendment that we accept this invitation with the proviso that if something of an unexpected nature absolutely prevents the acceptance of it, then the matter be left to the executive committee, with power to act.

Dr. J. R. DOBYNS, of Arkansas. I second the motion.

Dr. PERCIVAL HALL. Dr. Harris Taylor's motion, then, will be voted on. It is that we accept the invitation of Mr. Gemmill, representing the State of Iowa, with the provision that if it is found absolutely necessary to make a change in this plan the executive committee be empowered to do so.

Dr. A. H. WALKER, of Florida. Mr. President, I beg to apologize to this organization for my inability to present a substitute motion to the motion of Mr. Goodwin involving the same idea that is contained in the amendment of Doctor Taylor. That is what I meant to say in my resolution, and Doctor Taylor has worded it so well that I will accept with great pleasure his amendment.

Doctor HALL. Are you ready for the question? All those in favor of the motion by Doctor Taylor will please say "aye"; opposed, "no."

(The motion was put and carried.)

The ayes have it. It is so ordered.

I don't think that needs to be put again. That takes the place of the original motion, as I understand it, which was to accept it unconditionally.

The report of our treasurer is now in order. I will ask him to read simply the totals.

Mr. JONES, of Columbus, Ohio. Mr. President, that motion, as I understand it, is a substitution, but we haven't voted on the original motion.

Doctor HALL. You want to vote on that?

Mr. JONES. I should think so. The motion is that we accept the invitation of the Iowa school unconditionally.

Doctor HALL. The motion is that we accept the invitation of the Iowa school unconditionally. All those in favor of that motion please say "aye"; opposed, "no."

(The motion was put and carried.)

The ayes have it. I will ask Doctor Long, our treasurer, to just read the totals of his report in order to make it very brief, and will call for the report of the auditing committee directly thereafter.

(Dr. J. Schuyler Long, treasurer, read the report, as follows:)

REPORT OF THE TREASURER.

RECEIPTS.

1920.		
June 20.	Balance at last convention.....	\$257. 08
	Dues collected at Mount Airy convention.....	244. 00
1921.		
Jan. 1-Jan. 1, 1922.	Dues collected.....	68. 00
1922.		
Jan. 1-Jan. 1, 1923.	Dues collected.....	121. 00
1923.		
Jan. 1-June 1, 1923.	Fees and dues.....	120. 00
	Interest at savings bank.....	3. 55
		<hr/> 813. 63 <hr/>

EXPENSES.

1920.		
June 26.	Printing (W. W. Beadell) (109).....	\$1. 35
	Badges (110).....	15. 00
	P. Hall for L. H. clerical services.....	25. 00
	Col. Institution, printing (112).....	7. 00
July 19.	R. Pintner, expenses (113).....	24. 54
	A. L. Pach, photo (114).....	3. 00
Aug. 4.	Treasurer's bond (115).....	5. 00
Oct. 23.	Col. Institution, printing.....	1. 00
		<hr/> 81. 89 <hr/>

1921.	
June. Treasurer's salary (120).....	\$25. 00
Sept. Premium on bond (118).....	5. 00
Jan. 4. Cards for notices (117).....	1. 00
Aug. 12. H. E. Day, expenses (119).....	90. 37
Jan. 7. Printing notices (121).....	1. 25
	<hr/> \$122. 62
1922.	
Jan. Sending notices.....	1. 22
Mar. 4. 1,000 stamped envelopes.....	21. 75
June. Sending receipts.....	. 74
Treasurer's salary (123).....	25. 00
May 5. Flowers for Sicard (124).....	15. 00
March 2. Paper for notices (122).....	2. 90
Sept. Treasurer's bond (125).....	5. 00
	<hr/> 71. 61
1923.	
Jan. Sending notices.....	1. 38
Feb. 14. E. McK. Goodwin, expenses (126).....	33. 24
Sending receipts.....	. 80
June. Treasurer's salary (127).....	25. 00
	<hr/> 60. 42
	<hr/> 336. 54
Balance.....	477. 09
	<hr/> 813. 63

In the endowment fund, \$280.77; 212 paid-up members; 183 present; 241 registered.

Doctor HALL. I will ask Doctor Ely, of the auditing committee, to make his report as to the examination of the treasurer's accounts.

Dr. CHAS. R. ELY, Gallaudet College. Mr. President, I have to report that we have finished reading the accounts of the treasurer, and that we have found them correct.

Doctor HALL. Will you accept the report of the treasurer?

Dr. A. H. WALKER, of Florida. I move that it be accepted.

(The motion was seconded, put, and carried.)

Doctor HALL. The motion is carried. I wish to appoint at this time a committee on resolutions to bring in on Saturday, before we adjourn, resolutions that may be proposed for adoption by this organization.

I will name Superintendent Jones as chairman, Dr. A. L. E. Crouter, Miss Nettie McDaniel, W. L. Walker, and Supt. W. A. Caldwell as a committee to handle this matter.

I have a short report from the executive committee which I will ask you to listen to at this point:

REPORT OF THE EXECUTIVE COMMITTEE.

BELLEVILLE, ONTARIO, CANADA,
June 28, 1923.

To the Convention of American Instructors of the Deaf:

In conformance to article 4, section 5, of the constitution of the Convention of American Instructors of the Deaf, your executive committee has the honor to present for your consideration the following report of the work of the convention since the meeting at Mount Airy, Philadelphia, June 28 to July 3, 1920, and also several recommendations for the future.

As required by section 4 of the charter of the convention, a report of the proceedings of the twenty-second meeting was presented to the Congress of the United States, and was ordered to be printed by the Senate, June 6, 1921.

Copies of this report were distributed to members of the convention, to libraries, colleges, and universities. A number of copies remain in the hands of your committee.

It was decided by the executive committee to accept the cordial invitation of the authorities of the Ontario School to hold the twenty-third meeting of the convention in 1923 at Belleville. It was agreed to make the meeting international in scope and to extend an invitation to participate to the teachers of the deaf in the English-speaking countries of the world. After careful consideration it was decided not to make the gathering a joint meeting with other professional organizations.

Most of the details of the meeting were selected by correspondence with Doctor Coughlin, Superintendent Goodwin, and the heads of sections. But two consultations were held in Washington by your president, vice president, secretary, and members of the convention, one of them being an informal meeting with a number of members of the board of directors of the Speech Association. One of the members of the committee, Supt. H. T. White retired from our profession during the period between meetings.

The committee appropriated \$100 for editing the report of the twenty-third meeting.

It is recommended that the selection of the place of the next meeting be left to the discretion of the new executive committee.

It is recommended that an appeal for financial help for the deaf of China and the Far East from the convention by Mrs. Mills be called to the attention of the heads of the various schools present as worthy of consideration and support by pupil organizations of the type of the Christain Endeavor, Young Men's Christian Association and Young Women's Christian Association.

Your committee recommends the appointment by the president of the convention of a committee of five representative members for the careful consideration and report on the recommendation of the conference of superintendents and principals that the C. A. I. D., S. F. P. T. S. T. D., and the Progressive Oral Advocates be amalgamated into one body.

It is further recommended that article 5, section 1 of the constitution of the convention be amended by substituting the word "biennially" for the word "triennially" thus providing for meetings every two years.

The secretary, Mr. Bjorlee, reports as follows, with reference to the Bureau of Information, which embraces a Teacher's Agency:

"In former years the secretaries have received numerous letters from teachers wishing to secure positions in various schools for the deaf. The supply of teachers having been less than the demand during the past three years, there is little to report. In round numbers 50 teachers and officers have sought positions through the bureau during this period, while more than 100 letters of inquiry have come from superintendents. A list of teachers applying for positions has in each case been forwarded to the superintendent requesting information, and in a number of cases we have learned of vacancies thus being filled."

PERCIVAL HALL,
E. MCK. GOODWIN,
IGNATUS BJORLEE,
J. SCHUYLER LONG,
T. C. FORRESTER,
A. H. WALKER,

Executive Committee.

MR. FRANK DRIGGS, of Utah. Mr. President, I should like to move the adoption of the report and the amendments to the constitution.

MR. W. L. WALKER. I want to second that motion, and further, that there be a committee—that the president be empowered to appoint the committee mentioned in the report at the next meeting.

DOCTOR DOBYNS, of Arkansas. Mr. President, I am in favor of that, but I want to ask the question: Can you amend the constitution without more extended notice?

DOCTOR HALL. Yes.

MR. W. L. WALKER. If you have enough present to do it.

MR. T. V. ARCHER. I would like to ask one question: In case these associations do not amalgamate, would you still recommend biennial meetings for this association?

Doctor HALL. I think so. That is the spirit of the meeting so far. The feeling seems to be that we do not meet often enough.

(The motion was seconded, put, and carried.)

Carried unanimously.

There will be a meeting of members of the speech association in the kindergarten room at 8 o'clock to-night.

Doctor HALL. I am going to ask Doctor Rogers to serve as chairman of the committee that will consider the question of amalgamation, with Dr. A. H. Walker, Dr. A. L. E. Crouter, Dr. C. R. Ely, and Mr. T. C. Forrester.

Now I am going to ask Mr. E. McK. Goodwin to take the chair.

(Mr. E. McK. Goodwin took the chair.)

Doctor HALL. Mr. Chairman, I have had the pleasure of serving this convention for a number of years, and I ask the privilege to-day of nominating a gentleman whom you all know and love, one of the oldest members of the profession and one of the wisest as well. I think we ought to do him the honor of electing him president of the convention, and so I take great pleasure in nominating as president of the convention, as we now have come to the election of officers, Dr. N. H. Walker, of South Carolina.

Dr. J. R. DOBYNS. I second the nomination.

Dr. HARRIS TAYLOR. Mr. President, I move that nominations for president be closed (the motion was seconded) and that the secretary be empowered to cast one ballot for Doctor Walker.

Mr. J. W. JONES, of Columbus, Ohio. I second the motion.

Mr. GOODWIN (presiding). You have heard the motion and the second, to empower the secretary to cast the unanimous vote of the convention for Dr. N. H. Walker, superintendent of the South Carolina School for the Deaf, for president of the American Convention of Instructors of the Deaf. All those in favor of that motion make it known by saying "aye," any opposed "no."

(The motion was put and carried.)

The motion is unanimously carried.

Mr. IGNATIUS BJORLEE. I hereby cast the unanimous ballot of the convention for Dr. N. H. Walker as president of the convention.

Mr. W. L. WALKER. Some of us feel in our inner selves that we are at the edge, not of a precipice but of a more fertile plain of betterment for the deaf child, and that we are starting in a new field, and as vice-president of this convention for the coming three years I believe we should have a man who sees not in a narrow way, or a limited way, but who is a man aggressive, in his prime, and one who has a broad vision of the general education of the deaf, and it gives me great pleasure, Mr. President, to nominate Superintendent Gruver of the Iowa school for vice president of this association.

Mr. O. A. BETTS. I second the nomination.

Mr. GOODWIN. Are there any other nominations?

Dr. A. H. WALKER. I move that nominations close and that the secretary be instructed to cast the unanimous ballot of the convention for Superintendent Gruver.

Doctor TAYLOR. I second the motion.

(The motion was put and carried.)

Mr. GOODWIN. The secretary is instructed to cast the unanimous ballot of the convention for Superintendent Gruver, of the Iowa School for the Deaf, as vice president of the American Convention of Instructors of the Deaf.

Mr. BJORLEE. I hereby cast the unanimous ballot of the convention for Superintendent E. A. Gruver, of the Iowa school, as vice president for the coming term.

Mr. GOODWIN. The next officer to be elected is secretary of the convention. Are there any nominations? Mr. BJORLEE is now secretary of the convention.

Dr. AUGUSTUS ROGERS, of Kentucky. I move that Mr. BJORLEE be unanimously elected secretary of this convention.

(The motion was seconded, put, and carried.)

Mr. GOODWIN. Mr. BJORLEE is unanimously elected secretary of the convention.

The next office to be filled, a very important one, is that of treasurer. Nominations are now in order.

Mr. JONES, of Ohio. I nominate our present treasurer, Dr. J. Schuyler Long.

(The nomination was seconded.)

Mr. GOODWIN. Dr. J. Schuyler Long has been nominated for treasurer of the convention and seconded by a number. Are there any further nominations?

All those in favor of the election of Dr. J. Schuyler Long as treasurer of the convention will make it known by saying "aye," any opposed "no."

(The motion was put and carried.)

Doctor Long is unanimously elected.

There are three members of the executive committee to be elected by the convention. Nominations are in order.

Mr. JONES of Ohio. Whose time has expired?

Doctor HALL. Mr. T. C. Forrester, Dr. A. H. Walker, and Mr. H. C. White. Mr. White went out of office when he retired from the profession.

Mr. Chairman, if you will allow me to make a nomination, I would like to nominate Mr. J. W. Jones, of Ohio.

Mr. GOODWIN. Mr. Jones, of Ohio, is nominated.

Mr. W. L. WALKER. I would like to ask who the other members of the committee are? Who hold over?

Doctor HALL. Nobody holds over necessarily.

Mr. W. L. WALKER. It is a clean sweep? And how many do we have?

Doctor HALL. Three.

Mr. W. L. WALKER. I would like to nominate Dr. J. N. Tate, of Minnesota, as a member of that executive committee.

Mr. GOODWIN. We have the name of Doctor Tate, of Minnesota.

Mr. BLEDSOE. Mr. Chairman, I nominate Mr. F. M. Driggs, of Utah.

Doctor HALL. I would like to move that the nominations be closed.

(The motion was seconded.)

Mr. GOODWIN. It has been moved and seconded that nominations for the executive committee be closed.

(The motion was put and carried.)

The motion is carried. You have heard the nominations made. All those in favor of the election of the three members named, Mr. Jones, Doctor Tate, and Mr. Driggs, will make it known by saying "aye," opposed "no."

(The motion was put and carried.)

It is carried unanimously.

There is a report that we would like to hear now from the nominating committee, for chairman of the sections of the convention.

Dr. AUGUSTUS ROGERS, chairman nominating committee (reading):

The committee on nominations met in the library of the Belleville School, June 27, 1923. Present: Chairman Augustus Rogers, Miss Gertrude Van Adestine, Miss Grace D. Coleman, Mr. George F. Stewart, and Mr. W. A. Caldwell; Mr. Irving S. Fufeld also present.

The following were chosen to act as chairmen of the nine standing committees of the convention:

Normal section: F. M. Driggs, of Utah.

Oral section: Miss Bessie N. Leonard, of Northampton.

Auricular section: Miss Jennie M. Henderson, of Boston.

Art section: Miss Edith Jordan, of Jacksonville, Ill.

Kindergarten section: Miss Eugenia T. Welsh, of Rhode Island.

Industrial section: J. L. Johnson, of New Jersey.

Eastern local section: A. C. Manning, of western Pennsylvania.

Southern local section: A. H. Walker, of Florida.

Western local section: A. L. Brown, of Colorado.

Mr. GOODWIN. Are these offered as nominations?

Mr. ROGERS. Yes.

Mr. JONES of Ohio. I move that the report be received and accepted.

(The motion was seconded.)

Mr. GOODWIN. You have heard the motion to receive—and approve?

Mr. JONES. Yes, approve.

(The motion was put and carried.)

Mr. GOODWIN. It is unanimously carried, and these committees are appointed.

If there is no further business, the boat is waiting and the convention will stand adjourned till to-morrow morning.

(Whereupon, at 10.30 o'clock a. m., the convention adjourned until 9.30 o'clock a. m., to-morrow, Friday, June 29, 1923.)

FIFTH DAY, FRIDAY, JUNE 29, 1923.

PROGRAM.

8.30 to 9.30 a. m.:

Demonstration, Dr. E. L. LaCrosse.

Demonstration of oral class work. Grade 5, "History," room 5, Miss Catherine Ford, Ontario school.

9.30 to 9.45 a. m.:

General session, the president presiding.

Announcements.

9.45 a. m. to 12 m.:

Industrial session, Mr. J. E. Travis, of Indiana, presiding.

Paper, "The New Jersey school's industrial system," Mr. J. Lewis Johnson.

Paper, "A survey of after-school industrial pursuits," Mr. Lyman Steed, Pennsylvania Institution.

Paper, "The deaf in the industries from a social viewpoint," Miss G. Hasenstab, Illinois school.

Paper, "Agriculture as taught at the Wisconsin school," Duncan A. Cameron.

Paper, "Exhibits at fairs, etc.," President H. J. Menzemer, Montana school.

Paper, "The deaf man and the printing art," Mr. O. W. Underhill, Florida school.

Paper, "Domestic science," Miss Marian Ross, Virginia school.

Paper, "Primary industrial work," Mr. T. L. Anderson, Iowa school.

2 to 4.30 p. m.:

Aural section, Miss Grace D. Coleman presiding.

Paper and demonstration, "Method of testing hearing and standardization of terms," Dr. E. L. LaCrosse, Wright Oral School. Discussion.

Paper, "The awakening of latent hearing by means of musical sounds and vibrations," Miss Jennie M. Henderson, assistant principal Horace Mann School. Discussion.

Paper, "Use of the radio in auricular work," Principal W. A. Caldwell, California school. Discussion, Supt. E. McK. Goodwin and Supt. T. C. Forrester.

Paper and demonstration, "Results of auricular work," Supt. T. C. Forrester, Rochester school. Discussion.

Paper, "A school for partially deaf children," Miss Amy M. Croghan, London.

8 p. m.:

Lecture, "Education of the deaf in India," Sallendra Nath Banerji, Calcutta.

Address, Mr. U. Kawamoto, of Japan.

Music.

MORNING SESSION.

The convention reassembled at 9.30 o'clock a. m., Dr. Percival Hall presiding.

Doctor HALL. The meeting will please come to order.

I hope very much that everyone will plan to stay through our program. I know that a few have been called away, but I am sure that to-morrow we shall have a number of papers that will be of value to all. I know that this morning and this afternoon there will be much said that will be of interest to everybody.

I find that two of the papers which were originally put down for to-morrow will not be read. The writers are not able to be here, and the program will be carried out to-morrow morning very accurately. By beginning at 8 o'clock we should be through by half past 10 in the morning, then be ready for resolutions, and we should adjourn not later than 11.30, so that it will be possible for people to get the best trains going east and west. I do not think we shall have any difficulty in finishing our program completely, and I hope everyone will stay through that time and enjoy the meeting fully.

Mr. Travis, we are through a few minutes early, but if you are ready I will ask you to take the chair and start the program of the industrial section.

INDUSTRIAL SECTION.

Mr. J. E. TRAVIS, Indiana School (presiding). I wish all of you—the few who are here—would come up a little closer. Remember, those who read papers in this department are not used to speaking in public and they are not used to projecting their voices, especially into an empty hall, and if you will come up a little closer it will be more interesting to you and much more encouraging to them.

Before the reading of the papers begins, I want to make an announcement. We have a number of papers and we have a limited time, and this morning we shall have all the papers read through. We shall not stop for any discussion at the close of the paper, because we want all the papers read; then we shall know how much time we have for threshing out any questions that may be brought up; so anything of interest that comes to you in the reading of any one of these papers, just jot it down on a piece of paper, or make a note

of it in your head, and then when the time comes ask for a discussion of those points. Then we shall know just how much time we have. We want all the papers read that are here for reading. Two of them will not be read, so bear that in mind.

However interested you may be now in raising some question at the close of a paper, just refrain from that until we have had all the papers read, and then don't forget that question and bring it up.

With one or two exceptions in these papers it was the intention of the committee to have the person presenting the paper, or reading it, to just explain to this convention the things as they are done in the schools they represent, and then let the convention thresh out the theory of it; to tell us just what they do there—tell us how they do it. There are a couple of them to which that, of course, does not apply, and the first one on the program is one of that kind, and that is the "New Jersey industrial system." That will be read for us by Mr. Johnson, who is principal of the industrial department of the New Jersey school. His paper is simply an outline, so if you have any questions to ask, keep them in mind until we get through with the other papers.

THE NEW JERSEY SCHOOL'S INDUSTRIAL SYSTEM.

By Mr. J. LEWIS JOHNSON, New Jersey School

By whatever name we call our work or by whatever method we attempt its accomplishment, the result will be measured by the success with which our pupils take their places in the hearing industrial world; a world which as a result of modern competition has grown merciless, plays no favorites, and accepts no excuses, not even that of deafness.

That the New Jersey school has been asked to outline its system before this convention suggests that its industrial training might be good; those who are responsible for the development of that system are willing to admit that it is good, but not good enough.

In this day of highly developed competition in all vocations intelligent skill and efficiency in workmanship are the only credentials acceptable to the employer. In assuming the responsibility of developing these qualities in the pupils we are undertaking and are expected to perform a most difficult task; a task demanding the most proficiency in teaching, the best organization and equipment, 100 per cent cooperation among all the departments of the school; and most of all, the same sort of cooperation among all of the schools. We will help ourselves most by helping others. Close cooperation along these lines is difficult owing to the wide separation of the schools, and although the problem of the various schools may differ considerably, we have much in common and it would be helpful to all if by some means there could be more frequent exchanges of ideas and experiences.

In developing the industrial work at the New Jersey school we have been much helped by the contact and cooperation we maintain with the manual and vocational training organizations of the hearing schools in the State. These organizations, together with the State Department of Vocational Education, have exhibited their fine professional attitude by gladly taking us into their membership, thus encouraging mutual interests and benefits. This has been most profitable and serves to bring our graduates into closer contact with the hearing public.

The old contention that it is not practical to teach a trade in a school shop is not true in all cases. Many trades can be better taught in much less time by well-planned and skilfully presented courses of instruction and practice in school-shop classes than through the selfish methods considered necessary by many employers who must get more than they give.

With the right kind of teachers, organization, equipment, and methods, it is entirely possible for the industrial departments of our schools for the deaf to teach certain trades sufficiently to enable the pupils to continue their work successfully. This is what is required of us by the State which supports us and by the pupils who depend upon us; and we criminally wrong the community and

the pupil if we are satisfied to give them, by precept or example, less than the most and best vocational training they are capable of taking.

We believe the safest and soundest principle upon which courses of industrial training in schools for the deaf could be developed would be, first of all, to become intelligently informed as to the needs of and opportunities offered by the industries of the State in which the school is located, followed by the organization of a teaching program and courses in accordance with these facts. At the New Jersey school we have been endeavoring to follow such a plan.

As almost 100 per cent of the pupils come from and return to the industrial centers of a highly industrial State, for many years it has been the policy of the school to emphasize as much as possible the importance of vocational training, making it necessary to have in the shops the most complete equipment and a teaching personnel as well trained and qualified to teach as that of the other departments of the school.

Experience has proved that it is more profitable for our pupils if we confine the teaching in our shops instruction, as thorough as possible, in various branches of one or two trades, rather than in undertaking to spread our efforts too thinly over many trades.

Long ago those trades which were taught as much, or possibly more, for the benefit of the school than of the pupil were eliminated from our industrial courses; our efforts now being concentrated on the teaching of the printing and wood-working trades.

We find these two provide the broadest foundation for the fundamental industrial training of our pupils. The various branches of either afford many opportunities for specialization and intensive training as the pupil's vocational education advances; and present as many, if not more, opportunities for steady and profitable employment than other trades in our State.

Our girls are provided for by the trades usually taught, as domestic science, millinery, and dressmaking. Our efforts along these lines are intended to make of our girls good housekeepers and home makers, as well as to fit them for positions in the shops and factories, and many of them become expert dressmakers and milliners.

A card is filed for each pupil in the industrial department on which is recorded information regarding his progress in school, advice from his teachers, supervisors and parents, data as to his home environment, the opportunities that may be afforded him there, an accurate record of his progress in the shops, and whatever information can be secured about him after leaving school.

On file also we have information as to the industries in the different parts of the State and as to which employers have formerly, maybe now, or probably would encourage the employment of the deaf.

The industrial course covers a period of five years, from one to two hours each day being given to instruction and practice in the vocations taught. During the first two years the instruction is intended to provide as broad a foundation as possible in the fundamental principles of the trades. In the third and fourth years the pupils are encouraged to specialize in some particular branch of a trade.

In the fifth year the pupil, if he has completed the work of the academic department, is required to give 5 hours each day—25 hours per week—to practice in the particular kind of work he intends to follow after leaving school.

The shop schedule consists of 12 hours per week divided as follows: Periods of one to two hours each in shop language, shop arithmetic and drawing, and from six to nine hours trade practice.

In placing the pupils in the shops, consideration is given to their mental and physical capacities for the work, their own inclinations, the judgment and advice of their academic teachers, their supervisors, their parents, and the possibilities which may be afforded them in their home environment.

For one year previous to their enrollment in the regular shop classes all the pupils, both boys and girls, are required to attend a class giving instruction in the mending and care of clothing. Besides the value this preliminary industrial training has in teaching the pupils properly to care for their own clothing, it allows a check up on their habits of industry and application. Those who are old enough and strong enough are taught to clean and press clothing, to operate the sewing machine, and to cut and fit clothing for small children. Those who show an aptitude and preference for the work are allowed to stay in that class and are aided in continuing their training by working part-time in nearby tailoring establishments.

Appreciating the importance of trained observation, advantage is taken of every practical means to this end. Blackboards, charts, the stereopticon and

moving-picture machines are freely used in the shops, and arrangements are made to have the pupils visit other schools and the industrial and manufacturing establishments of the city.

Drawing, shop language, and shop arithmetic are taught in all the shop classes by special teachers who devote all their time to these subjects. The work is so planned, in cooperation with the trade teachers, as to give from one to two hours per week in each subject throughout the five years in the shops. This instruction is intended to supplement the work in the academic department by providing opportunity for its practical application to concrete problems afforded by the shop projects.

Notebooks are employed, the pupils being taught to make and enter notes, sketches, and drawings. Much emphasis is laid upon the value of their preservation for future use, and every effort is made to encourage the development of habits of reference to the books and magazines found in the shop-class libraries, so that at the completion of the course they may know how to find the information needed to enable them to keep abreast of the progress of their trade.

Instruction in elementary drawing is given in the primary classes of the academic department. This instruction is continued in the shop classes and is so planned as to give a thorough foundation in the general principles, and to be related as closely as possible in every practical way to all the trades taught.

Increasing in difficulty as skill is acquired, the lessons provide opportunity for those who show ability to specialize in the subject and develop their talent.

A brief outline of shop language and shop arithmetic follows:

First year courses in both these subjects are intended to give the pupils practice in the use of the fundamental principles of language and number work, as presented in the academic classes, to the language and arithmetic problems of the shops.

In language during the first year the pupils are taught the names of all the principal tools, machines, materials, furniture, and equipment.

The second year work consists of practical application of grammar to the technical language of the shops.

In the third year compositions describing tools, machinery, supplies, etc., are developed by questions and by the outline method.

In the fourth year instruction and practice is given in reporting shop news, writing letters of application for employment, answering advertisements, and correspondence with each other regarding the work being done.

Fifth year work provides instruction and practice in the use of technical terms, phrases and language generally, and the study of industrial occupations and trade history.

Shop arithmetic during the first and second years is planned to afford instruction and drill in the practical application of the fundamental operations to the more simple shop problems.

Third-year work gives instruction and practice in solving shop problems involving the use of fractions and percentage as applied to the cost and quantity of material used.

Fourth-year work covers instruction and drill intended to develop skill in the use of the rules, formulas, and other devices commonly used in trades for the purpose of solving arithmetical problems.

The fifth year brings practice in the solution of problems common to the home and business in general, such as the costs of food, clothing and materials, rents, taxes, reading gas and electric meters, also square root, instruction in plane and solid mensuration, plane geometry, elementary algebra, pulley and gear speeds, machine and forge shop problems, and similar advanced work relating to all the trades taught.

The courses in mechanical drawing, the various branches of the woodworking and printing trades, the dressmaking, millinery, and domestic science classes are all carefully planned and followed with the idea of developing skill and initiative in these vocations.

A well-equipped laboratory for the study of elementary chemistry and science is maintained in which the experiments are correlated with the subjects taught in the shop classes.

Special provision is made for those pupils who may not be able, because of their limited physical or mental capacity, to follow the regular work in the shops; and every effort is made to teach them something within their powers to enable them to earn a living.

Realizing this is an age of machinery, of specialization and of speed and quantity production, we endeavor to maintain in our shops, as nearly as possible,

conditions similar to those found in the industries about us into which our pupils must go and compete.

This demands, as in the factories, constant improvement in the equipment of our shops. It also means the employment of teachers who are constantly on the alert to keep informed as to the most approved methods of procedure employed in the trades and in the teaching profession.

The development of initiative, skill, and speed; an appreciation of the importance of the time element in the production of finished work; and valuable experience in the development of that ability to cooperate with others—so necessary to the competent workman—all are provided for in the advanced classes by the printing each month of the Silent Worker and the Silent Worker Supplement, and by the manufacture, at present, of large quantities of furniture for our new school buildings.

These projects are never allowed to interfere with the educational program laid out for the pupil. If they do not afford the maximum benefit to him they must be provided for in some other way.

A special industrial course covering one year is available to former pupils or others who may wish to take it. Those who take this work are known as industrial students and are placed on the pay roll at a very nominal sum. They must give their services to the school to whatever extent required, and in whatever capacity needed. We accommodate from 6 to 10 such pupils each year and have a waiting list, making it necessary to select only those most competent to receive the instruction offered.

We do not undertake to secure employment for our graduating pupils, but we often find ourselves in a position to advise them intelligently in this respect.

While the system of instruction is intended to train the pupils as thoroughly as possible in the trades taught, it is realized that, because of the limitations to be encountered in shop classes and occasionally in the capacity of the pupil, it is often difficult to develop journeyman workmen. While this is true, the records of our work show that more than 95 per cent of our graduates are successful in securing and holding profitable employment.

Some of the pupils may secure employment in lines of work other than those followed at the school, but their fundamental industrial training proves sufficiently broad to enable them to fit themselves to the environment in which and to the opportunities they find for themselves.

Mr. TRAVIS. Please remember that if there is any question you wish to ask, wait until we finish the papers.

THE DEAF IN THE INDUSTRIES FROM THE SOCIAL VIEWPOINT.

By GRACE E. HASENSTAB, Social Service Field Worker.

The ever-present question in our minds as we train deaf boys and girls in our schools is, Are we fitting them well for their life with the employing public? Being associated as I have with all classes of deaf people, in all conditions individually and collectively, I have come to recognize certain facts, even though they are not all as I should like to find them.

Our deaf are dealing with an average public made up of the rank and file of humanity who are not always unprejudiced, not always considerate nor understanding. It is a public which thinks of all deaf people according to the one or several it has known, whether that impression be favorable or not. The public does not judge hearing people that way.

This is distinctly a human problem. In surveying their successes and failures we must remember they are individuals who can not be, with fairness, classed in one great group and settled. We remember, too, that our per cent of college graduates and State school graduates is comparatively small when we think of the overwhelming per cent of our deaf who did not go beyond the fifth grade.

Statistics are at best a bit unsatisfactory. However, in going over the employment papers we sent out to the deaf of Illinois we have found very much the same per cent as was published in Harry Best's chapter on the vocational life of the deaf as compared with that of the hearing. His questionnaires of 12,678 over 20 years of age showed 11,670 to be gainfully employed.

	Number.	Per cent of deaf.	Per cent of general population.
Agriculture.....	4,761	37.5	35.7
Manufacturing and mechanics.....	4,583	36.1	24.4
Domestic and personal service.....	2,395	18.9	19.2
Trade and transportation.....	552	4.4	16.4
Professional.....	387	3.1	4.3

The deaf have about the same as the general population (hearing) in agriculture, personal and domestic service, and the professions.

The deaf have a higher percentage than the hearing in manufacturing and mechanical occupations.

It is lower for the deaf in trade and transportation where obviously hearing and speech are necessary.

Under these headings we have subdivisions of labor which show that the occupations which are successfully filled by the deaf are more varied and much larger in number than are generally supposed. In the smaller towns we find the variety of occupations noticeable. For instance, in one town where there are 10 deaf men we find 2 mechanics, 1 shoemaker, 1 assembler, 1 cigar maker, 1 laborer, 1 sheet-metal worker, 2 woodworkers and 1 printer.

Now naturally the question comes, Do the deaf follow to any marked degree the trades they work at in school? According to 100 answers, chosen at random, we find that 30 per cent do follow the trade they learned in school. Of these 30 we find 8 cabinet makers, 6 printers, 5 farmers, 3 shoemakers, 3 bakers, 3 dressmakers, and 2 painters. This need not discourage us in the least, because in being in shops they are being taught to think and to work, and invariably the knowledge is utilized. One preacher who was in the printing shop in school now attends to the printing of a little church paper which is sent all over the country. Many farmers use their knowledge gained in the cabinet shop and make many, many conveniences for their use about the farm and home. And so the fact we find holds good for all trades.

If you and I were deaf we would find, in going out into the business world, that the deaf man subconsciously has the feeling that no matter what his line of labor the hearing public considers him as one who is in a way "on probation." He must make good in spite of their casual uninterest. This strained condition can not help but be a handicap, and yet it is our public attitude which causes it. Many of the deaf are able to rise and make good by going into business for themselves, such as establishing shoe shops, tailor shops, or being dressmakers. In this way they are largely independent and are not constantly being critically analyzed.

In larger towns and cities we find a marked tendency to group themselves. Wherever one capable deaf man has been well received we usually find others. Rand & McNally's Publishing House in Chicago, the plow factory in Springfield, the Ford Motor Co. in Detroit, and the Goodyear Co. in Ohio are all examples of this.

Employers and foremen have been very frank in discussing the value of deaf labor. Almost without exception, they have stated that if they had a good deaf man they knew his loyalty to the company was 100 per cent, and that they knew that the deaf man, in nine cases out of ten, would stay with the company rather than change about just for the offer of a few cents more per hour from another company. They feel that the deaf man concentrates and gives more work per hour than many hearing men.

We can not dodge the fact that the deaf are barred from certain fields of labor. Our industrial world has been built up with hearing in mind. All safety devices and signals are arranged for the ear such as bells, whistles, etc. So it is but natural that the public feels (it knows not exactly why and can not argue very convincingly) but it feels it is not safe for the deaf. This condition led to an investigation to determine the average per cent of accidents as compared with that of the hearing public. We know the deaf are barred from most insurance companies because they do not hear. You and I know that now the deaf have an insurance company of their own. The National Fraternal Society of the Deaf, is made up of only deaf people. If accidents among the deaf were common, such a company could not stand. As it is, this is not only a good proposition, but is as standard as other insurance companies. Mr. E. Irving Fiery who is con-

nected with one of the largest standard insurance companies has stated that if anything, the accident rate was definitely lower for the deaf than for the hearing. So, if facts are really known, our general suppositions can not remain firm.

There is one fault I find with us of the hearing public. I am sure we can not know just where the fault lies, but I find the same condition everywhere I go. We do not put ourselves in the place of those who are deaf. Unless a deaf person has confidence enough in himself that he speaks and reads the lips well, he prefers to use the finger spelling and the sign language. If you and I do not use the sign language readily, our conversation with the deaf is limited to writing. In our world, you and I are constantly giving out expressions of our interest, our friendliness and our sympathy through casual light conversation with those about us. The deaf person can not do this. He usually writes just those things which are worth writing and loses out on the casual friendly conversation which plays so important a place in our lives. If we were to write all that we say to those about us our writing would be voluminous too. When we do not have the same touch with the deaf we are prone to have the feeling that the deaf are not interested and do not care. In reality they do care and are hurt by our unthinking impatience when they hand us written communications.

Often we hear of unjust discriminations. These upon investigation almost always are found to have two sides. I can explain best by giving two examples which were brought to my attention recently.

1. A very capable, efficient tailor was refused admittance to the union. The membership was almost a necessity in the city where he lived. After two years he applied again, taking a hearing friend with him. He found out that the reason he had been barred before was not because he was deaf but because at that time positions were very scarce and the union could not take on additional members, since it guaranteed employment to each member of the union. This had never been explained. Therefore, naturally enough, he thought he had been barred because he could not hear.

2. This is a little different case. In barber shops there is a system of promotion from the back to the front chair nearest the door. Strangers usually drop in to the first chair, thus giving that barber the advantage of more business. When vacancies occur the barbers are moved up in order of their efficiency. A deaf man who was an excellent barber worked in just such a shop for many months. The proprietor, however, never moved him up no matter how many vacancies occurred. When month after month other promotions were made, the deaf man felt quite conspicuous. His work was good, yet he was not promoted. Finally the deaf man left and went to another town. When the proprietor was consulted he said there was no question in his mind but that the deaf man's services were excellent and that it was even better than many hearing men's. Yet he did not feel that he could give him a chair nearer the door because he could not hear. He felt that friends and regular customers would go to the deaf man's chair regardless of where he was in the shop and that his trade would be the same whether he was in the first or the last chair. Therefore he did not change his position. Was it fair? I leave it with you.

It is all a great question and we all will do what we can to help ourselves to understand. Life has its hard and smooth places for the deaf as well as for the hearing. After meeting with the deaf, talking with them, and living with them, I like to think of them best just as Dr. Dan Brummitt said, "Not as poor deaf folks, but just as folks who happen to be deaf."

AGRICULTURE AS TAUGHT AT THE WISCONSIN SCHOOL.

By DUNCAN A. CAMERON, Wisconsin School.

It is a source of deep regret that I am unable to go to Belleville and meet with you at this convention. I am very much interested in the fine program arranged by the committee in charge. I certainly am glad that the teaching of agriculture in our schools for the deaf is to be discussed.

Only within the last 25 years has the teaching of agriculture become part of the curriculum in the schools of the United States, yet it is now taught in more than 15,000 schools.

While schools for the deaf have been pioneers in vocational training, the teaching of agriculture has been carried on in a haphazard way, and it is only within the last few years that several of our State institutions are teaching agriculture in a scientific way. In justice to our schools however, it may be said that they

are not entirely at fault, as the summer vacations, when some of the practical work on the farm is done, have in a way interfered with the adoption and carrying on of instruction in agriculture. However, if the vacations have proven no great handicap in the public schools, they should not prove insurmountable with the deaf. It is perhaps of more importance to have a course in agriculture in the schools for the deaf than in the public schools.

If all the leading citizens who live in the best farming regions recognize the value of agricultural education and do all they can to encourage the teaching of agriculture in the public school, why should not deaf educators plan to give a course in agriculture to the deaf?

The aim of teaching agriculture is to explain to the deaf children the facts about farming that puzzle them. There are many things that are mysteries to them for the simple reasons that they have never heard their folks and friends talk about them so they never realized their existence. No attempt should be made to teach them new things except such as are necessary for the proper explanation of those they have met with in their experience on the farm. The object of giving them instruction in agriculture is to enable them to understand the reasons of things they have observed but do not understand.

Agriculture is a subject of great variety; it is not possible to teach everything but we should aim to cover a few topics which the pupils themselves may apply when they return to their farms. Wisconsin is one of the greatest dairy States in the United States; we aim to teach as much about dairying as possible though we do not want to overlook other branches of agriculture.

The length of time devoted to agriculture in our school varies from one to three years. Little can be done in a one-year course so a three-year course is to be preferred. We have two classes. One is studying elementary agriculture while the other is taking an advanced course.

During the first few weeks the boys in the elementary class are taught the vocabulary and language of the farm.

I will tell you a little story. One day an Irish sailor who ran away from his ship in New Orleans went up the Mississippi River on a steamboat to a place in Illinois where he found a job on a farm. The farmer asked him, "Can you hoe corn?" The Irishman not understanding the question, replied, "Yes, I can." A hoe was handed to him and he went to a corn field. By and by the farmer saw him busy cutting corn with the hoe instead of hoeing it.

The farmer stopped him and said, "What are you doing?" The Irishman replied, "You told me to hoe corn and I am doing it." He did not know what hoeing meant. This story shows the unfamiliarity of the Irishman with the language of the farm.

So we think that the only thing to do before the boys in the elementary class take up textbooks is to see that they should acquire the vocabulary of the farm within the first few weeks.

The textbook which they use covers a general course in agriculture. The book should have the language simple enough so that the pupils should find no difficulty in understanding the subject matter.

The advanced class during the second and third year spend as much time as possible in studying some of the important subjects, such as soils and soil fertility, agronomy, breeds and breeding, feeds and feeding, and dairying. The instructor gives them lectures in connection with the lessons.

In the lectures the teacher strives to make the subject matter more interesting and instructive to them than the textbooks. Of course, the lecture is given in the sign language. The result of these lectures is that the pupils become eager to read agricultural papers. When they find something new about farming, they often bring the papers to the instructor. It encourages them to read. Giving lectures will also stimulate the pupils to ask questions.

In the winter the pupils do some work in soils and crops, which include a few of the exercises in soil physics, the mechanical analysis of soils and some experiments in pots with soils, fertilizer, and plants. They test seed corn. They go to the barn to get points in judging dairy cattle and hogs. At present we do not have lessons in stock judging, but I hope that we will have a place in the barn in the future where the boys can learn to judge cattle, hogs, and horses.

I have tried to give the boys practical work in the dairy barn in two State schools for the deaf; it was a success in some ways, but I found that it was hard for some of them who, on account of the need of rising early to milk cows, were unable to keep up with their class work in the school. To keep them working in the dairy barn all the time without recompense is not to be recommended, but I believe that it would be a good plan to give them some light work around

the dairy barn and other structures for horses, swine, and poultry every afternoon for a short time.

In the dairy work the pupils learn to test whole milk, cream, and skim milk. It is possible to make testing milk pleasant and instructive if the work is varied from time to time. One day I had them test the first, second, third, and fourth parts of milking, and the last part—stripping milk from one of the cows. The last part of milk tested very high and the lowest test was the first part. From the result of this testing the boys understood the importance of stripping a cow in order to get a good quality of milk. I have also had the boys test the milk to show how the milk of different breeds varies.

The boys are taught principles of feeding to dairy cattle, raising calves, and the sanitary methods of handling milk, and a talk about bacteria is given to them.

They have an examination once a year during the winter. In the spring they have less class work than in the winter because they go outdoors to do garden work about two hours every afternoon when weather permits.

Last spring they made a hotbed for tomatoes, cabbage, pepper, and cauliflower and did the transplanting. They learned how deep in the soil the seed should be planted according to the size of the seed. In the garden the boys were taught why the soil should be kept in loose condition with a hoe, a hand cultivator, or a riding cultivator, and why a cultivated field should be free of weeds and insects.

The older boys who study agriculture have made trips to demonstration of pruning trees given by one of the professors from the College of Agriculture of the State University. They have also visited model farms which are run by progressive farmers who were glad to show them through the barns where purebred cattle were kept. The best time to see the cattle, horses, swine, sheep, and poultry on the farms around Delavan is in the winter when they are sheltered in the barns.

Last winter three of the boys who graduated last June went to Madison during the week when the Wisconsin farmers' organizations held their annual meetings. It gave the boys an opportunity to meet with well-known farmers and stockmen from all over the State. They attended the exhibits of purebred grains grown by the members of the Wisconsin Experiment Association.

They witnessed the demonstration of efficient feeding and management of livestock in the barns of the experiment station. They were surprised when the men who have been experimenting with the feeds and feeding told them that yellow corn has a greater feeding value than white corn because the yellow corn is richer in fat-soluble vitamins. The boys saw striking results which were secured where yellow corn was compared with white corn, with skim milk as the supplement. There were two pens of pigs. In one of the pens, where the pigs were fed yellow corn and skim milk, they were thrifty, while in the other pen the pigs fed white corn and skim milk looked very poor.

The other departments in the agricultural experiment station were open to the boys to examine many things kept in the station for experimenting purposes. It was but a short time before the boys were convinced what a great help the station is to the farmers.

We have a set of farm knowledge books, reference books, Government bulletins, and farm papers for the classes to use when they can and they are encouraged to read them. The fact that they are extensively read goes to show the interest of the pupils in the work.

The next paper on the program is one that relates to the survey of after-school industrial pursuits, by Mr. Steed of the Pennsylvania school.

MR. STEED. When Mr. Travis spoke to me he asked me to read the survey that was made at our school, but the survey is a lengthy one and I find that it will be impossible for me in the time at my disposal to read it, so I have answered the questions that he gave me in his letter: "Do pupils follow the trades pursued in school?" I will try to answer that question briefly. [Reading:]

DO PUPILS FOLLOW THE TRADES TAUGHT AT SCHOOL?

The real test of vocational education is—that it shall pay for itself. If it does not it is not the right kind.

Men who understand industrial conditions realize that the expense of training a man on the job is one of the great industrial costs. They also know that the cost of inefficiency and the lack of training is a great deal more and that workmen must be trained no matter how much it costs. There is no better economy than the training of deaf pupils for the pursuits of agriculture, commerce, industry, and the home.

In some of our institutions for higher education, the cost of progressional training runs well into the thousands of dollars per student graduated. Vocational training for the common wage earning pursuits and the skilled trades is as essential as training for the professions. The humblest deaf worker equally with the youth of our land, who proposes to enter the professions, has a right to vocational training in order that he may function normally—i. e. earn his livelihood, support his family, and render service to the community in which he lives by helping to do its work.

Because we as a profession believe that vocational education is worth while and are constantly concerned in making it worth while, the question of results is ever before us.

Too often results are expected when the industrial department is not adequately equipped. Some of us can sympathize with the writer of the following. It was found nailed to the door of a deserted cabin in the West.

"Fourteen miles from a neighbor; 21 from a post office; 30 miles from a railroad; 39 miles from a church; 170 from timber; two and a half from water. God bless our home! We have gone to get a fresh start."

Assuming, however, that our industrial departments are thoroughly equipped, that the instruction is comprehensive, that the pupils are carefully placed, and that trades are taught suitable to the community in which the pupils are to find employment, we can feel reasonable assured that our pupils will be well trained.

It has been the experience at Mount Airy that pupils graduated and discharged in the majority of cases follow the trade acquired at school or some closely allied trade. Many become metal workers of some kind. Most printers and wood workers follow their trades; of the rest from 40 to 60 per cent also follow the trades acquired at school, the balance drift into other occupations, many of them becoming factory operatives and mechanics.

Our field officer reports that all pupils now employed as printers, tailors, or shoemakers are doing well.

Pupils who leave school before they graduate or receive an honorable discharge are usually compelled to accept positions as unskilled laborers, often at a good wage but with little chance of advancement. They may roam around for a time but remain unskilled laborers unless they can get into a shop—such as the machine shops at Altoona—and work up from the bottom.

Shifting, when pupils first leave school, may be due to the change from school to shop conditions; but it is often found that the pupils who go from job to job after they leave school are the pupils who constantly desired to shift trades at school.

When pupils change their trades, it may be because there is no opportunity in the community, they are poor workmen, or they left school too soon. In the majority of cases a pupil, who has learned a trade well, will leave home if necessary in order that he may follow it. Poor workmen will always have difficulties. By poor workmen I mean those pupils who can not meet a new situation and are able to do a routine task only after much training. Henry Ford says that he has found many men who prefer a dull, monotonous, routine job. When pupils leave school at an early age they are usually not mature enough to have developed satisfactory powers of judgment and reasoning and employers will accept them only as apprentices. For instance, if they enter the printing trade in Pennsylvania, they are not allowed to join the union until they are 21 years of age. Several years must be added to the school apprenticeship before the real work and the real pay of a printer can be secured. Under this condition boys often become dissatisfied.

A number of our graduates are employed on farms. Many of them drift back to the cities. This seems to be a social rather than an economic problem for the deaf workers, like their brothers, prefer to find companions with similar interests rather than to remain where working conditions are good but social opportunities few.

A chaplain in the United States Army in France stated that he found a number of soldiers whose heroism, loyalty, and devotion to others were of the highest type and still they scoffed at God and religion. Upon inquiry he found that every one of these men had had a careful home training when small and had been regular church attendants. He stated that no matter how much they scoffed, the principles instilled in their youth showed in every word and act.

This is just as true of our industrial training. If pupils complete their trade instruction, no matter whether they follow their trades or not, the spirit of self-confidence engendered and the habits of industry inculcated can never be eradicated.

Mr. TRAVIS. We shall now pass on to the next paper, "Industrial displays at fairs, etc.," by one who has been making a practice of that work, President H. J. Menzemer, of the Montana school. Is Mr. Menzemer present? He was here a moment ago.

A VOICE. He is outside in the lobby, I think.

Mr. TRAVIS. We will pass right on to the next paper, and call upon Mr. Menzemer after this paper is read.

The next paper is "The deaf man and the printing art," by Mr. Underhill, of the Florida school, instructor in printing.

THE DEAF MAN AND THE PRINTING TRADES.

By Mr. O. W. UNDERHILL, Florida School.

To help the deaf to live a higher and happier life, to enjoy more fully the blessings of earth, and to appreciate more intelligently the work of the Creator is, without question, the all-important duty of those of us engaged in the teaching of the deaf; for we alone are responsible for most of what a deaf child knows and is able to do when he leaves school. What he needs most, and the best means of giving it to him are for us, his instructors, to decide. So on us falls a very delicate task. While training a deaf pupil in school, we must ever have in mind that the paramount trade to be taught him should be the one that will give him independence upon leaving school. What is it that will give him this independence? Clearly and simply, the ability to earn bread and butter. Next to the teaching of English the most important thing is the training of the pupil in some trade. What would be the use of giving him an academic education if he goes out into the world without any means by which to earn a livelihood? It is so necessary for the deaf to be taught a specific branch of work that I would prefer omitting some one of the scholastic branches if all can not be taken up. It is gratifying, however, to see that more and more attention is being given to trades training in our American schools for the deaf than ever before.

Printing seems to be the most universally taught of all trades in schools for the deaf. Printing may be classified as including the following allied trades: Linotyping, monotyping, lead and rule casting, hand composition, stone work, bindery, photo-engraving and etching, and press work. According to the tabular statistics in the Annals for January, 1923, out of 64 residential schools in the United States, 50 teach printing; cabinetmaking, including carpentry, coming next with 49. Only two public day schools teach printing. Printing is taught in all of the five Canadian schools for the deaf. According to the best information there is a larger per cent of adult deaf employed in the printing trade than in any other line of work that requires skill, with the possible exception of agriculture.

I am not here to tell what and how best to instruct in the printing trades, but rather to lay before you for your information some of the interesting facts regarding the relations of the deaf to the printing trades as they are to-day. To the end that I might be able to handle my subject intelligently, I prepared and sent out three separate sets of questionnaires, the first to employers of deaf printers; the second to heads of schools for the deaf; and the third to deaf printers now employed. Considerable difficulty has been experienced in securing returns owing to limited time and indifference of a good many in making prompt and full response. But I trust the data so far obtained, though somewhat incomplete, will be of value as a beginning, considering the magnitude of this undertaking, to say nothing of the aid it will be as a basis of forming a better judgment of the importance of printing as trade training in our schools.

EMPLOYERS OF DEAF PRINTERS.

Forty-seven questionnaires were mailed to those leading printers who in my knowledge employ deaf printers, eliciting replies from 33 as shown in the accompanying statistical statement arranged for your convenience. Most of the replies came from printers in the East and South; only five from beyond the Mississippi. I did not have in my possession names of firms employing the deaf in the last-named section, but I presume the conditions existing in the East are about the same as those throughout the country.

I. COPY OF QUESTIONNAIRE.

1. Do you employ any deaf printers? If so, how many?
2. What specific line of work do your deaf employees do?
3. Do you find their work satisfactory in every way?
4. Do you consider deafness a handicap in the printing trades?
5. What wages do you pay your deaf employees?
6. What are your means of communicating with your deaf employees?

II. REPLIES TO INQUIRY FROM EMPLOYING PRINTERS.

Question 1. Employment?

One firm employs 7 deaf printers; 1 firm employs 6 deaf printers; 4 firms each employ 4 deaf printers, 16; 3 firms each employ 3 deaf printers, 9; 11 firms each employ 2 deaf printers, 22; 13 firms each employ 1 deaf printer; 13. The 33 firms employ a total of 73 deaf printers.

Question 2. Line of work?

Linotype operators, 15; machinist operators, 2; monotype operator, 1; monotype caster, 1; hand compositors (job), 19; foremen, 2; photoengraver, 1; proof reader, 1; platen pressmen, 4; press feeders, 9; binders and folders, 9; ad men, 3; make-up men, 3; head man, 1; cutter, 1; all-around man, 1.

Question 3. Work satisfactory?

Yes, 29; in some ways, 3; no report, 1.

Question 4. Deafness a handicap?

No, 27; yes, in some lines, 4; do not know, 1; no report, 1.

Question 5. Means of communication?

Written instructions, 21 firms, 43 employees; employees can talk and read lips, 4 firms, 7 employees; employees can talk but can not read lips, 8 firms, 13 employees; foreman can talk by the manual alphabet, 5 firms, 9 employees; no report, 1 firm, 1 employee.

NOTE.—Some employers have 1 or 2 with whom they communicate in writing and 1 or 2 by speech.

Question 6. Wages?

Below \$15 per week, 11; between \$16 and \$20 per week, 8; between \$21 and \$25 per week, 12; between \$26 and \$30 per week, 10; between \$31 and \$35 per week, 8; between \$36 and \$40 per week, 11; between \$41 and \$45 per week, 8; over \$45 per week, 5; total, 73.

HEADS OF SCHOOLS FOR THE DEAF.

The total number of questionnaires sent to heads of schools for the deaf in the United States (public day schools not included) was 50 and replies were received from 41. The replies were so varied that it was a little difficult to prepare a tabulated summary therefrom. This summary is given in the following statements:

I. COPY OF QUESTIONNAIRE.

1. Do you have instruction in linotype operating?
2. How is your print shop equipped?
3. Do you consider your shop well enough equipped to give a practical course of instruction?
4. (a) Is your instructor of printing a hearing or a deaf man? A "combined" man? (b) His salary?
5. (a) What is the average number of apprentices in your printing class? (b) How many hours per week are devoted to instruction?
6. (a) What qualifications in a deaf boy do you think are necessary to turn out a good linotype operator? (b) What do you do with those of limited abilities?

7. (a) What is the estimated number of deaf persons having received instruction in your school now following the printing trades? (b) How many of these are linotype operators? (c) How many of these own print shops?

8. (a) Do you or your instructor of printing help the graduates to get jobs on their leaving school? (b) If so, how?

9. Do you give postgraduate courses to those not sufficiently prepared to follow the trade successfully?

10. Do you consider printing one of the best trades for the deaf?

II. REPLIES TO INQUIRIES.

Question 1. Instruction in linotype operating?

Number of schools having such instruction, 21; number of schools having no linotype but soon will have, 11; number of schools having no such instruction, 9; total, 41.

Question 2. Equipment of print shops?

Well equipped, 6; all equipped except linotype, 17; fairly well equipped, 14; poorly equipped, 4; total, 41.

NOTE.—All except three have no equipment for bindery work.

Question 3. Sufficiently equipped to give a practical course of training?

Yes, 27; yes, except linotype, 11; no, 3.

Question 4. (a) Instructors, deaf or hearing?

Deaf, 22 (9 of whom are combined men); hearing, 19.

(b) Salaries?

From \$650 with board to \$2,200.

Question 5. (a) Average number of pupils to class?

From 10 to 25; average, 16.

(b) Number of hours of instruction?

Average, 13 hours per week per pupil, or a little over 2 hours daily.

Question 6. Qualifications necessary to turn out a good linotype operator?

(1) A working knowledge of English; (2) experience at hand composition; (3) good eyesight; (4) mechanical ability; (5) a natural inclination to do that kind of work. Those with lesser abilities had better not continue in the trade, though several think they will do well at hand composition and press feeding.

Question 7. Estimated number of deaf printers following trades?

Many were unable to answer, having made no records, but on the face of returns from 22 school heads, there are 628 deaf printers, 64 of whom are linotype operators, and 11 of whom are owners of shops.

Question 8. Do you help the graduates get jobs? If so, how?

By recommendation and certificates, 12; by personal solicitation, 2; more requests for graduates than can be supplied, 12; no, they can help themselves, 15.

Question 9. Postgraduate courses in printing?

Number of schools giving postgraduate courses, 17; number of schools not giving post-graduate courses, 20; number of schools willing to give such courses, 4; total, 41.

Question 10. Do you consider printing one of the best trades for the deaf?

Yes, 39; no, 2.

DEAF PRINTERS NOW EMPLOYED.

Some 60 inquiries were mailed to those deaf printers now following the printing trades whose names and addresses were available. Thirty-two replies were received, 11 letters returned undelivered, and the others remained unanswered. I sent these inquiries only to well-known deaf people, not including the deaf instructors in State schools and those employed in the Government Printing Office at Washington. It is to be regretted that the replies were not more numerous, as they might be an expression of the "voice" of the deaf themselves in regard to the printing trades.

I. COPY OF QUESTIONNAIRE.

1. (a) Are you employed in a printing trade? (b) If so, what specific line of work are you engaged in?

2. (a) Did you learn the trade at your school or outside? (b) If in school, do you consider the training you received sufficient to give you a good start? (c) If not, where do the faults lie?

3. (a) Would you rather do some other line of work than printing? (b) If so, what are your reasons?

4. (a) How do you get instructions from your foreman or employers? (b) Do you find speech and lip reading of value to you?
 5. (a) How much per week do you get for your wages? (b) A living salary?
 6. What suggestions do you have for the improvement of the teaching of printing at your alma mater?

II. REPLIES TO ABOVE QUESTIONS.

Question 1. Number of employees to each branch?

Linotype operators, 15; hand compositors, job, 7; pressmen, 2; owner managers, 5; foreman, 1; adman, 1; stoneman, 1; total, 32.

Question 2. (a) Trade learned at school?

Yes, 19; no, 13.

(b) Training at school sufficient to give good start?

Yes, 11; not much, 3; no, 5.

(c) Where do the faults lie?

Poor instruction, 4; poor equipment, 2; too much commercialism, 1; 1 answered nothing.

Question 3. Would you rather follow some other line of work?

No, 30; yes, 2; prefers out-of-door work, 1; no chance for promotion, 1.

Question 4. (a) Means of communication?

By writing, 14; by speech, lip reading, and writing, 10; by finger spelling, 6; by speech and writing, 2; total, 32.

(b) Do you find speech and lip reading of value?

Yes, 16; not much, 7; no, 9.

Question 5. Wages?

All with the exception of two get not less than \$30 per week, the largest salary being \$66 per week. Average, \$43.50. The five owner-managers report earnings by year of from \$1,500 to \$6,000 net.

Question 6. Suggestions for improvements in school print shops?

Answers very much diversified, but summarized in a general way as follows: Better and more modern equipment, including linotype, 23; more time to be given to training, 3; better instructors, 2; satisfied with school shop as it is, 2; give post-courses in linotyping, 1; new building for trades training, 1; total, 32.

From the collation of information from the employing printers we learn the following facts:

1. As a whole they are not discriminating against the deaf, and a majority express entire satisfaction with their work. One made this remark, "The best man in the shop;" another sent in a request for more deaf printers. It seems true that a large percent of the printers throughout the country are familiar with the deaf and their work.

2. A good many of the deaf employees are holding down the more responsible positions in print shops, and a surprisingly high per cent are linotype operators. This in view of the fact that it has been only a short time since instruction in linotype operating was introduced in our schools.

3. The average wage paid deaf printers is \$28.50 per week—a living salary. Printers and pressmen get all the way from \$20 to \$35; linotype operators from \$30 to \$50. These are the union scales, and the deaf invariably gets the same wages as the hearing for the same class of work.

4. Most employers resort to writing when they communicate with their deaf employees, though in many cases speech and lip reading are used in a satisfactory way. In big print shops instructions are given on the "job ticket," and it is seldom necessary for the deaf to ask for explanations.

From the replies made by the heads of schools for the deaf we find that:

1. Almost half of the residential schools for the deaf now have instruction in linotype operating, whereas only three years ago there were scarcely over a dozen. And a good many of the other schools not having a linotype machine report plans to introduce this phase of instruction in the near future. That is very encouraging, indeed, and before long any bright deaf boy desiring to follow the trade can have the opportunity.

2. The equipment of many school print shops, though probably sufficient to give the rudiments of a trade education, is not ample or modern enough and is usually poorly chosen with a view to its educational value and uses. Much of the equipment was bought years ago, therefore is entirely out of date, and should be replaced with modern equipment as far as possible if we want to make really good printers of our apprentices.

3. Nine out of the 22 deaf instructors of printing are combined men; that is, they teach a literary class besides printing. That may work satisfactorily in small schools, but in large ones instructors should concentrate almost all of their energy along the printing line in order to secure good results. The average salary paid the instructors of printing is around \$1,500 a year, which is reasonable; but to keep competent instructors (experts in printing who can easily get employment in any big plant at over \$50 per week) in schools, more attractive salaries should be granted.

4. The average number of apprentices in a printing class is 16, while 4, on an average, graduate, and 4 are admitted each year. The average time allowed in most schools for the teaching of printing is about 13 hours a week per pupil, or a little over 2 hours daily, and the length of time for a full course is from five to six years. That should be sufficient time, though a little more would be better.

5. The qualifications in a deaf boy to turn out an expert printer or linotype operator should be a good working command of English, a good mechanical ability, that peculiar "knack" that becomes a part of the make-up of a printer, etc. While many of those with limited abilities may do well at press-feeding and on the cases, it is advisable, and undoubtedly the opinion of most instructors in printing, that they do not remain at the trade longer, but are sent to a more congenial occupation. Unskilled printers get low wages.

6. The heads of schools have "lost count" of deaf persons having received instruction at school now following the trade, so the returns are inaccurate. However, if we take as a basis the data from, say, North Carolina, where 60 out of 1,200 deaf persons are now employed at the printing trades, then there are something like 2,250 printers out of the estimated deaf population of 45,000 in the United States.

7. As to the schools helping the deaf get work upon their leaving, a majority of the heads say they do it both by letters of recommendation and by personal solicitation. Some, however, said they have had more requests for printers than they could supply. Others maintained that the deaf printers have no trouble in securing steady work by themselves. A majority of the schools do give, or are willing to give, post-courses to those not sufficiently prepared, especially in linotype operating. All but two heads agree that printing is one of the best trades for the bright deaf; some even go so far as to say it is the very best.

The data obtained from the deaf printers furnish the following interesting information:

1. Most of them follow the trade they learn at school, though a number of operators say they learned linotype operating outside. The latter, as a rule, were not very enthusiastic about giving credit to school shops for the instruction they received some claiming that they had to learn for the most part outside. No doubt this was due to two things—incompetent instructors and poor equipment. But these replies came from those who had left school years ago. Conditions are improving and remedies are being rapidly made nowadays.

2. The deaf printers as a whole are satisfied with their work, and are getting living wages. Those who own and run shops are meeting with remarkable success.

Summing up, I would say that printing and its allied trades are among the very best for the deaf possessed of the necessary qualifications; that beyond any doubt the deaf can make good linotype operators; that there should be more systematic courses of instruction and better equipment in our school shops; and that a little more time should be given to the teaching of printing.

Care should be taken about assigning a deaf boy to the printing trade, for we are determining for him his future career. He must have intelligence above the average and must be made of the right stuff. But we should not insist on the idea that printing is the most desirable occupation for the deaf. Some might do better in some other line, but the manual training they receive in the print shop will be valuable not only in the way of developing a certain amount of manual dexterity and care and precision in operations but also as the means of earning money while pursuing a college course. If a deaf pupil will do well as an agriculturist, or a chemist, or at some professional trade, he should not be asked to follow the printing trade. But of all the trades now taught in American schools for the deaf, printing seems to offer the best means of preparation for the life work of the bright deaf boy.

In conclusion, it is my hope that having given the foregoing facts and suggestions, many of our schools will hereafter make greater efforts to bring about better conditions in our printing shops so that more deaf boys of this and coming generations may enjoy all the opportunities of learning the wonderful art of printing to the fullest extent.

Mr. TRAVIS. Doctor Coughlin wants to make an announcement before we take up the next paper.

Dr. C. B. COUGHLIN of the Ontario School for the Deaf. I just want to say something in regard to the Thousand Island trip. As a number of people have been inquiring about it, we tried very hard to arrange for a trip to the Thousand Islands for to-morrow, but we could not do it without breaking up the proceedings of the convention, which we do not feel warranted in doing, but we may be able to arrange so that the people who desire to do so may be able to take trips individually. I would suggest that those who would like to consider taking that trip meet in the kindergarten room, say, at 1 o'clock, and then we will find out what arrangements can be made.

I wish also to say that the shops will be open all day—the printing office, the carpenter shop, the shoe shop, the barber shop, and the kitchen. A number of people have expressed a desire to go through the kitchen, and you will be free to do so at any time. If you go through just before dinner or just after dinner, the kitchen is likely to be in a muss, and you can see the muss if you care to do so. Just walk in and out and go around with perfect freedom. You are welcome to go any place.

Mr. TRAVIS. There is another announcement that the bursar asked me to make, and before I forget it I will make it myself. I may even forget to ask Doctor Hall to do so.

All exhibits that were brought here under bond must be sent away under bond. He has given his own bond to the officials here and these things will be done according to law, so he wishes that all of you who have exhibits here to get together and have them packed at the same time so that one trip of the official to the school here will answer the purposes of the law.

Now Mr. Menzemer, we shall be glad to have your papers on "Exhibits at fairs."

Mr. MENZEMER. It is not my purpose this morning to tell you what you could or should do in regard to exhibits at State or other fairs. I simply want to tell you what we are doing out in Montana, to assure you that with us it is very much worth while.

EXHIBITS AT FAIRS.

By H. J. MENZEMER, President of Montana School.

In approaching this subject, it is well, perhaps, to state the reasons for such an exhibit. The first and probably most important, is to let as many people as possible know where we are located. This will sound a little strange to you who come from the older and smaller States, but it is a real need with us. We are located in a comparatively small town in a large State. If you will get on board the North Coast Limited at Spokane, Wash., which is just a little over the western border, at 10.30 p. m., and travel east, you will still be within the eastern boundary of Montana the second day at 2.50 a. m. Again, if you take the train at Havre at 3 a. m., and travel south, you will arrive at Dillon at 6 p. m., and both of these towns are a considerable distance from their respective boundaries. So you will not be surprised when I tell you that we often get such letters as this:

"DEAR SIR: Some one has said that he thought that a school for the deaf was located at Boulder. If so will you kindly tell me what are the terms of admission and the expenses connected with it? We have a deaf child which we are very anxious to have educated," etc.

The second and perhaps almost as important reason is to show the people not only of our State, but of any and all States, what the deaf can do. Some people who visit us show astonishment, amounting almost to awe, when shown

some nice piece of work done by the deaf, indicating that previously they had classed us with the insane and other incompetents.

Then, too, you can always find the politicians and lawmakers at the fair, and you can usually induce them, before election, to stop and view your display. If some one piece catches the eye of the senator or representative, and you tell him something of interest about the pupil who produced it, you can usually depend upon him to bring this up when most needed; but at all events if they know about you, your chances with the legislature are very much better than they would be otherwise.

Accordingly, we have a display at the State and county fairs and plan to extend this to include the Empire Fair at Billings. Besides this, we have a display at the close of each session of school.

Two years ago the building at Helena, in which all school work was displayed, was burned, and it has not as yet been replaced. So we are quartered here and there and everywhere. When the new building is built we hope to have more commodious and convenient quarters than ever. Then, again, we can have our demonstration work where it will be worth while.

I might say in connection with this that up to the time that this building was burned we had always had at least some demonstration work going on in our school, but since that time it has been almost impossible to do this. However, we plan to resume this as soon as the new building is completed.

At present our exhibit is made up of samples of literary school work and art, for the most part mounted on large sheets of cardboard, each lettered—by the pupils—with the name of the work, grade, etc.

Next comes the industrial work. Our work in printing is displayed much as is the literary, but in addition we have several copies of our Leader and some other printing including the annual report on the table.

The cabinet shop work is shown by exhibiting the work of the pupils, from the little toys, etc., made by the beginners, to the fine desks, chairs, etc., produced by the older pupils. One thing we can not show at the fairs and that is our carpenter work. We have built a root cellar, over that a garage, and over that a "model cottage"—for domestic science work—and aside from laying up the brick walls our boys did the work. This building, 30 by 40 feet, full two-story, and double-walled basement, cost us considerably less than \$2,000.

As work turned out by the girls, we show dresses and other wearing apparel made by them, fancy work, mending, etc., and samples of cooking, baking, and preserving.

The general advantages, then, of an exhibit at the fairs are really matters of education. By such a display we let thousands of people know where we are located, something of the work we are doing—of what the deaf are capable of doing. We get personally acquainted with many people whom it would be impossible otherwise to meet, and distribute literature, some of which reaches the people to whom it is of interest; and all this at a cost of perhaps \$25 or \$30—\$20 of which we usually get back in the form of the first prize—for in the last 11 years we have entered in competition nine times, and have received the first prize eight times and second once.

Mr. TRAVIS. The next paper on the list is on domestic science as taught at the Virginia school, which will be presented by Miss Marian Ross of that school. Although Miss Ross is deaf, she will read her own paper and Mr. Betts will interpret it for her.

DOMESTIC SCIENCE.

By Miss MARIAN ROSS, Virginia School.

The program committee has chosen a most opportune time for this topic. It will soon be dinner time, and my subject is "Domestic science." By the time I finish talking about pies—lovely, nice, juicy pies—all in a row, or cakes, "Um yum," we shall all feel and do as the young man did, who, perpetually "broke," was once asked by a friend to dinner. He decided to work up an appetite by beginning at one end of the town, looking in each restaurant window and imagining what he would order if he were going to eat there. By the time

he reached the last one, he was so ravenously hungry that he went directly to his friend's house and ate such a tremendous dinner that there was hardly enough for the rest of the party. Only in this case we won't need restaurant windows; our imagination will do the work.

I have been asked to tell what we were doing in domestic science in the Virginia school. To begin with, I had rather curious material to work with in my first year. Some of the girls came from nice homes. Most came from poor homes and farms, one or two from the mountains where they lived under almost primitive conditions. It sounds improbable, but it is a fact. Some of them use the bark of trees for plates, make a hole in the ground, build a fire on stones in the hole, then when the stones are red hot, put in an iron pot with all the food mixed up and cook it, or they use the big fireplace with cranes just as in our great-grandmother's time. Most of the girls did not know the names of the utensils they had to work with in school; some had never seen them before. So, for the first year's work, we learned the parts of the stove, the principle of the fire, elementary cooking, rules for baking, names of utensils, etc. We had a hard time learning the names of utensils. All methods failed until we hit upon the plan of cutting out pictures of utensils and pasting them in our cookbooks with the name underneath each one and a note of explanation of its use. This made something that would help the children to make clear to their mothers what they had at school.

Toward the close of the year I decided to have an examination in cooking. The children were petrified, for they had never heard of a cookery examination. So I fooled them by telling them that we were just going to play, and wrote my examination in a story form. For example, "One morning very early, John and Mary went for a walk. They were far from home, when suddenly it began to rain. They were soon very wet, but they walked on until they came to a farmhouse. They knocked and were admitted. They found that a lady and her sick sister lived there. The house was cold. The lady had been so busy with her sister that she had forgotten the fire. She now made the fire. How did she make it? Then she made some coffee. What is the coffee rule? But Mary did not like the coffee, so she made cocoa. How did she make it? What is the cocoa rule?"—and so on through a whole day's work. It worked beautifully. The girls forgot to be scared; they were so interested in the story that they did their best and all passed.

For the second year we had advanced cooking, stressing teamwork, simple dietetics, sick-room nursing, some budget making, utilization of left overs, and menu making. Here is an example of how much we needed this last. For the board of visitors' dinner one girl was going to have salt pork, cabbage, ice cream, and cake. Another was going to have baked beans, cabbage, ice cream, and cake. Another said, "Tomatoes, corn, beans, peas, cake." Still another girl, who came from a fine southern family, said, "Roast beef, fried chicken, beefsteak, roast pork, sweet potatoes, mashed potatoes, tomatoes, peas, beans, corn, ice cream, apple pie, chocolate pie, lemon pie, pumpkin pie, chocolate cake, angel-food cake, and coffee." The poor members of the board: What would have been left of them? The girls were not to blame. It was what they had at home. They improved so much, however, in their work that year that they gave two dinners to the members of the board, and this year they gave an informal tea to the members of the faculty and some of the town people. On the latter occasion they all talked, eliminating signs entirely, and most of them were understood.

I know that many of you superintendents are opposed to the third year in domestic science. I am not, and this is why. Most of our deaf girls do not go on to college. The majority stay home and get married, and what they learn in an institution is not enough to get married on. Their mothers can't always teach them, and many times they won't. I had an experience which started me to thinking, so I am going to pass it on to you. A young girl, 17 years old, who was taking my course, suddenly left at Christmas time to be married. I asked her what she knew about marriage. Why, she knew all about it. She could sweep the floor, wash the dishes, cook some, sew a little, make a fire, and do a few other things. I asked her if she knew how to keep a budget, how to save money, what cuts of meat were cheapest, how to care for children, etc. "Oh, no," said she, cheerfully; "I'll live with his mother and she'll help me." And off she went. More than a year later I heard from her. She was weak, baby was sick, and husband was ill from malnutrition and had lost his job. The house was filthy, for she had never learned management. The grandmother had been feeding that tiny baby potatoes, cabbage, and corn. The girl herself looked as if she were 25. That is why I advocate the third year in domestic science. In this year would be given dietetics, household economics, budget making, baby care

(care of baby brother or sister), house furnishing and care of the house, where and how to economize—just to lay the foundation upon which the girls themselves can build as the need grows.

I have also been asked to give some suggestions that I have found helpful to me in my teaching. One of these refers to the household chart. The names of the pupils in the class are written on a large sheet of paper, with the household duties numbered according to the following legend:

HOUSEHOLD DUTIES.

Wash dishes.....	1
Wipe dishes.....	2
Put away dishes.....	3
Sweep floor.....	4
Mop.....	5
Brush slates.....	6

And so on.

At the head of each ruled column on the chart is the date when the class meets. In the first column are the numbers 1, 2, 3, 4, 5, 6—just as many numbers as there are girls, with a corresponding "duty" for each number. The next column begins with 2 and ends with 1, the third column begins with 3 and ends with 2, and so on, a real progressive party idea. This saves much controversy and bickering, and the schedule for the whole year can be made out at one time. The following chart will give a concrete idea of the plan:

Pupil.	September.					
	19	20	21	22	23	24
Miss A.....	1	2	3	4	5	6
Miss B.....	2	3	4	5	6	1
Miss C.....	3	4	5	6	1	2
Miss D.....	4	5	6	1	2	3
Miss E.....	5	6	1	2	3	4
Miss F.....	6	1	2	3	4	5

Another suggestion is the examination in story form which I explained a few moments ago. The girls are certain to respond to it.

One thing I learned from my own institution life was how lessons can drag. How tired I used to be to see everybody else doing the same thing that I was doing, just so much and no more. So, remembering that, I combine my lessons as much as possible. If the lesson is a pie lesson, apple pie for instance, I divide the class into three groups. One group uses lard in making the crust, another butter, and the third uses half butter and half lard. One group uses lemon for flavoring, another nutmeg, and the last cinnamon. The pies are marked, and when baked are cut up into small pieces and judged as to which is best. Then follows a discussion as to the why and wherefore of such and such ingredients, the result being that the class has learned three times as much as would have been possible in the old way. Or, if the central theme of a lesson is tea, coffee, or cocoa—ordinarily a dry affair—I make an informal "tea" or party of the lesson, with the discussion of tea or coffee a subject of conversation. They have previously done outside reading on the topic. Then they copy the questions from the slate and answer outside after class.

Another suggestion is that with regard to the procedure of class work. The recipes should be written on the slate. On the side slate the class assignments and questions on the day's work may be indicated. When the class files in, the instructor should sit down also, explain the meanings of the difficult words, point out where to substitute, how much to use, what to look for, and so on. Then the work may begin. While the article is cooking, the pupils should copy the questions and recipes. When they have finished sampling their cookery, they ought to clean up the kitchen. If there is any time left they may answer the questions; if not, they can do that out of class. This means that they have been over the lesson three times, which helps to fix it in their memory, making it unnecessary to cram at the last minute.

Mr. TRAVIS. We have one more paper, and then we shall be ready for any discussion that may come up on this subject.

The next paper is on "Primary industrial work," by Mr. T. L. Anderson, of the Iowa school.

PRIMARY INDUSTRIAL WORK.

By Mr. T. L. ANDERSON, Iowa School.

By modern educators the attitude is rightly taken that our "shops" are a part of the general educational scheme of the schools, and as such must be organized and the work conducted along recognized school lines.

In organizing our industrial departments to bring them properly into the general educational system we have several immediate purposes in view, as follows:

1. To conduct these various departments as a unit in the school system.
2. To correlate the work of this unit with the work of the school unit.
3. To bring into our industrial work instructors who have fairly divided their training between scholarship and the necessary special experience.
4. To provide a means of training primary pupils in industrial school habits, of accustoming them to industrial school discipline, and finally of placing beginners in the industrial departments with due consideration to ability and fitness.

While the discussion in this paper centers about the means we have adopted at Iowa for the accomplishment of the last-named purpose, a little attention here to the other purposes named will not be out of place.

Educators of the deaf who take pride in the fact that schools for the deaf were pioneers in industrial education now admit with chagrin that our industrial work is behind the times. It would seem that the results obtained in the public school industrial training departments are causing us no little concern when we come to draw comparisons. What is there in the manner of presenting such training in the public schools that is responsible for this difference in results?

The writer believes that one of the greatest factors making for this difference has been a more or less definite determination in schools for the deaf to make our industrial work seriously vocational. We speak of teaching trades, and of fitting the deaf to earn their living. The earlier a young boy can kick off some hand-bills on a press or nail some boards on the barn, the greater is the rejoicing. From a recent report of one of the State schools, we quote the following:

"One of the chief aims of our school is to teach each deaf boy a trade in order that he may be a self-supporting element immediately upon stepping into the world."

A regular publication from another State school affirms that the school "is fully prepared to give to the deaf a trade by means of which they may become self-sustaining."

These are indeed broad claims. These schools attempt to accomplish the miracle of teaching a trade within the period covering the average graduate's industrial training experience. Let us say a boy starts his industrial training at the age of 10 years. He is probably in the fourth grade with seven years of school ahead. Working 2 hours a day, 6 days a week for 40 weeks, he works 480 hours a year. In 7 years he works 3,360 hours. A working day is 8 hours, so the schoolboy gets 420 days of work in the shops before his graduation. In a little over a year's actual working time some of our schools are striving to impart knowledge and practice of trades to mere boys additionally handicapped in their school work, that normal young men are not expected to cover in a period of less than several years of steady application in the real trade atmosphere.

It is freely granted that we have a worthy ideal in striving to make the deaf boy's schooling count for more practical value than the schooling of the average youth. But is it not just as fatal to overshoot a mark? Are we not sacrificing much of great educational value in this effort to major the production of skilled hands? Are we not operating our industrial schools too much apart from our academic departments? To the observer it seems that we have placed trade instruction in the hands of tradesmen who have allowed themselves to grow out of all sympathy with the aims of education in their efforts to cover an impossible amount of ground. The crying need is for an institution of higher trade instruction for our graduates, to take the place of our make-shift postgraduate work.

If we are to put our industrial work back on an equal footing with that of the public schools, we must first revise our objective; second, get our various shops

back into the general school course, the instruction outlined and correlated with the general school work and accredited as part of such; and third, give more attention to teacher-training as part of the equipment of industrial instructors that they may rightly deserve to stand upon a more equal footing with the other members of the teaching staff.

It must be considered that not every boy who studies arithmetic is going to become a bookkeeper or a mathematician. Neither is every boy who takes the printing course bound to become a printer. There is no good reason why the instructor of either should feel disposed to slight the work of instruction, or to relax in the requirement of definite daily progress on the ground that it is time wasted because no practical use will be made of the instruction. It would seem, then, that every shop is a classroom. Let us treat it as such. Let us outline as much of woodworking, of printing, of shoe and harness work, of painting, of any other recognized worthy industry as experience teaches us an average boy can expect to master with a fair portion of its correlated mass of information. And let us put each pupil through this course under the supervision of well-paid instructors, trained and in every way capable of making the subject matter logical and interesting. How this reorganization can be accomplished and this correlation made a fact, are subjects for discussion extended beyond the limits of this paper. All of our industrial work within the limits of a high school education is really "primary" in the vocational sense, inasmuch as it is merely the foundation for apprenticeship to the trades. In dealing with this subject we are making special reference to the first year of industrial work for young boys, and to the means we have adopted at Iowa for handling this primary work.

Nowhere in the modern school plan is there recognition of wisdom in the indiscriminate association of beginners, or primary pupils, with advanced pupils. The proper grading of pupils in school begins with a year of careful primary work, to accustom pupils to school habits, and to prepare them for school discipline. If our "shops" are to become an integral unit of the school they must come under this same plan.

At Iowa 10 hours a week are devoted to the primary industrial class. The schoolroom is outfitted for woodworking. On account of the large number of boys on hand for training at the time we began this class, and the necessity of taking care of them all during the single afternoon shop period, we established this department somewhat larger than one instructor can handle for best results. But even so, our results have been satisfactory. Eighteen boys are provided for at separate benches, each with his own set of simple tools. The cost of full equipment for each individual was \$40. This does not include cost of a turning lathe added later. Ten boys might reasonably be considered a large class for one man to handle in order to get best results, and two classes of one hour each is better than one class of two hours.

The boys in this class range in age from 10 to 13 years, the same boys who formerly did inconsequential jobs about the place requiring supervision. All conditions considered, 10 years is about the right age for a beginner.

Woodwork was chosen as the medium of instruction for a number of reasons. First of all, the course is being developed in the spirit of modern pedagogy, having the play spirit, the child's point of view in the work foremost. Woodwork is admittedly the most adaptable to the motivation of this class work, as most articles of interest to young boys are made of wood with or without metal parts. Toys, games, articles for personal use not requiring much skill in the making; these form the basis of interest so essential to the successful prosecution of this work. Some schools have "sloyd," some have "manual training," the subject matter in most cases more or less stereotyped. At Iowa we do not adhere to any one system in its entirety. We try to make the nature of the work as flexible as possible, adapting it to the seasonal interest of the boys. The subject is not considered important outside of its interest value. The importance of this work lies in the method. The models and projects are selected with a view to their fun-giving value and are made the basis of language work, form study, and study of construction principles.

The fun-giving value is present in whatever a child likes to make to be used in his play. Articles of seasonal interest are such as various toys for little brother or sister at Christmas, which take up the whole fall period in their joyous making; sleds and scooters for winter coasting; game boards for the winter play hours indoors; kites and bird houses in the early spring; express wagons and roller coasters to take home for summer play. In between come the various things childhood fancy dictates; wooden hearts for valentines, hatchets for Washington's Birthday, small rabbits for Easter; traps for small animals; boxes of all sorts for personal belongings; cannon and guns for the Fourth. A Government dredge

operated for some time near our school. Several primary boys watched it at work, and, wild eyed, they pushed aside their other projects in the shop and out of scraps assembled from all over the place made models of the dredge that would work like the original.

So much for the nature of the work. As to training in industrial habits and in the discipline, we are very strict. There is no distinction made between school conduct and shop conduct. Every boy is held to being promptly in line, dressed in clean overalls, shirt, and tie. Neatness of appearance is stressed with promptness. Once in the shop, each boy has his place and is expected to be in it. As much as possible, everything the boy needs is taken to him at his place, or he is allowed to get it upon his request. Discipline is regarded as the foundation of the boy's industrial career, and habits of order, obedience, promptness, neatness, truthfulness, and trustworthiness are stressed as essential to industrial success. The discipline is enforced by punishment swift and sure, but with the ideal of fairness. Rebuke and high praise are impartially bestowed, both with straightforward publicity. As to the nature of punishment, when some young fellow gets himself seriously "in bad" a sentence of an afternoon's work in the laundry with the girls is usually sufficient to bring him into beautiful behavior; while to be deprived of his bench and placed on the yard force for any length of time is regarded by the average beginner as capital punishment. It is futile to scold. Far better to aim at puncturing a small boy's self-esteem.

The greatest value of this primary class in its relation to the other industrial departments lies in the opportunity it affords to select beginners for the various departments on the basis of their ability and natural bent. As we have done it in Iowa, we believe we have as reliable a method of judging the fitness of a boy for pursuing a particular industrial course as can be found.

During the year in the primary class the boys work under the careful scrutiny of the instructor who seeks to discover any hidden talents and to appraise those revealed. Some of the boys he sees clearly have a talent for woodworking. They are quick, accurate, appreciate form and finish and are interested in the work. These are placed in the carpentry department after the first year. Other boys are not so good at woodworking. They may be intelligent enough, but somehow they fail to grasp a conception of form and finish, their crude efforts are the result of much painful labor. If any of them have shown artistic ability in painting their toys, they are sent to the sign-painting department. A division of the remaining group is made on the basis of language ability. Those with a good language foundation are selected for the printing class, the others going to the shoemaking class. This system has been successful in Iowa. Of course, selections made at this time are not supposed to be final, and transfers are allowable for good reasons. Considering our educational ideal, no harm is done the pupil who learns what he can of several industries.

Regarding the type of instructor needed for this primary work, it may be said that he is charged with the responsibility of laying a firm foundation for the boys' industrial school work, and therefore he has a harder, more exacting task than any of the regular industrial teachers. The work is more of a character-building matter, and a talent-appraising device, than it is regular instruction in woodwork, consequently a trained teacher with a knowledge of woodworking who has had experience with boys and understands their nature will have the advantage over the man merely skilled in woodworking. It would seem that superintendents who are dissatisfied with their trades instruction might take the desired forward step by placing the highest type of instructor they can find in charge of their primary work, gradually bringing the other departments up to his lead.

As to language work, we can not expect a great deal of the primary boys as a class. It must be remembered that several lower grades from the school are represented here. Some boys will have a fair command of language; others almost none at all. Wherever possible the instructor should work to the ideal of spoken, written, or spelled language in all his commands and in most of his explanations. This will be difficult in many cases, and especially in explanations recourse to natural signs will have to be made. Then, too, we are apt to be dealing with a child absorbed in making something dear to his heart, and he will likely have little patience with us or our language.

Regardless of results, an interested child has no parallel for application and industry. It is not here deemed wise to interrupt boys so young in school work to inject formal language teaching. The instructor should be very thorough about supplying the names of everything, and in requiring these names to be used,

but he should not bring in the language feature to the extent of making it tiresome. These youngsters have already had a full day at school work, and a different kind of mental activity is now wanted as a stabilizer. The effort should be to encourage application and maintain interest in the work at hand. The names for every tool, material, model, or new object introduced should be supplied and endlessly repeated. Lists of names and verbs should be made out, printed in bold type and sent to gladden the grade-teacher's heart. The same list of names should be cut out and glued to the proper tools and objects. A printed label should be put on everything. The words should be kept before the eyes of the boys. Even the most backward will learn these names and through the proper cooperation of the grade teachers, which should be insisted upon, will get them into his language. Let the shop instructor drop into the schoolroom and look over the blackboard work frequently to gain a better idea of how the boys are using their language, just as the grade teacher should frequently visit the shop to become familiar with the source of the new words the boys are using. In this way the foundation of shop language is laid, one word at a time at the proper time. It is our conclusion that this is all we should expect of the beginners.

Naturally, in a class of this kind, peculiar problems arise and must be solved. For instance, woodworkers must measure material and use their rulers daily. Not having had any arithmetic, the boys will find fractions of an inch a stumbling block. It is not practical to attempt to teach fractions in the shop. When we found our work halting here, the writer devised a foot ruler for these boys, marked in eighths of an inch, each mark clearly numbered, as $6\frac{1}{8}$, $8\frac{3}{8}$, $9\frac{7}{8}$, $10\frac{1}{2}$, etc. They now have no trouble in locating any commonly used mixed number up to 12, without having to master fractions. To find the center of a board they are taught to take a piece of paper and get the width of the board on it. The paper is then doubled to mark the center. Four equal parts of a board are found in the same way. At the beginning of the work the hectograph is a splendid means for supplying outline drawings which the boys can transfer directly to the wood by means of carbon paper. As the imitative faculty is highly developed in most of our boys, it is advisable to provide models in addition to pictures and drawings, especially for the more complicated objects. Working from models, however, has its dangers. With a set of models once assembled, the tendency will be toward getting into a rut, thus destroying initiative in both instructor and pupil. On the whole, the alert instructor will find many ways in which deficiencies in school work may be evaded until the happy day arrives when the work of the industrial schools will be more thoroughly correlated with that of the academic department.

Mr. TRAVIS. One of the subjects that we had assigned for a paper for this meeting we failed to have responded to in the way that we had expected, and that was one that was touched on very sharply by the paper that has just been read. That is the question of the teaching of shop language in the schools, and that has been assigned to Mr. Vernon S. Birck. He is not here. He did not prepare a paper, but we have here the superintendent of the Missouri school, who, I think, can show us, or ought to be able to, as he is from that State.

Will you tell us something about the teaching of shop language in the Missouri school, Mr. Tillinghast?

Mr. E. S. TILLINGHAST, of the Missouri school. I did not expect to talk on this subject at all. There are some other things that I would rather talk about, but I will say briefly on the teaching of shop language that it has been carried on in Missouri for about 8 or 10 years. Two of the former superintendents of the school were themselves teachers of shop language at different times, and the plan has been for the teacher of shop language to go into the shop, mingle with the boys and teach them the names and explain the work, largely individually, not in a class or by attempting to take them out into the classroom and teach them as a class.

From my limited observation in the study of the system, so far as I have observed it, I do not really approve that plan of attempting to teach shop language.

I agree with the remarks made by Mr. Anderson in his paper. I believe that the proper line of approach in the teaching of shop language is through close correlation of our schoolroom work and shop-work, and not by attempting to make a separate feature of shop language, with a special teacher to teach the language of a dozen trades. Mingling with the boys in the shop and teaching shop language individually, it seems to me, is a very great waste of time. The work of the teacher under that plan is almost entirely individual, and while he is working with one or two here some of those near by are more or less distracted from their work. It is sometimes difficult to have this teacher working with his pupils in entire harmony with the shop instructor, because the regular trade instructor's work is more or less interrupted or interfered with by the shop language teacher. Therefore, so far as I have observed under the conditions under which it has been carried on in Missouri, I am not particularly favorable to the plan and will probably change it.

There is another matter I want to bring up, that it seems to me is very important. It was touched upon in Mr. Steed's paper, and I want to speak of that in connection with the remarks in Mr. Anderson's paper. The question is, Do our pupils follow the trades which they are supposed to learn in schools? You will remember that a few years ago a survey was made in the Pennsylvania school, and an attempt was made to get a reply from a large number of graduates and ex-pupils of the school as to whether they were really following the trades that they had learned in school. It seems to me from an analysis of this survey that as a rule boys do not follow the trades learned at school. I have here the report of the Pennsylvania school, and if I make any error in my interpretation of these figures I will be glad to be corrected. If boys do not follow the trades learned at school in a great majority of cases, shouldn't that fact modify our industrial training—modify it in the direction of giving more general industrial training and less specialized trade instruction? In other words, following the line of thought in Mr. Anderson's statement, we find that we do not have sufficient time really to teach a trade thoroughly, and in many cases have not full equipment and have not the trade atmosphere, and yet we try to turn out finished workmen. These workmen as a rule apparently do not make good in the trade followed at school—that is, they do not follow out as a life work the trade which we endeavor to teach them.

Now, I will read just a few of these figures. We have but very little time and I can only take but just a moment, but there were 365 questionnaires sent out and 146 replies received from them.

The average age of the pupils replying was 23.3 years. Now, notice the average youth of the men making these 146 replies. At the time of the reply these men were 23.3 years of age, on an average. Their average time in school had been nine years. I notice here that out of 146, 107 had been in school periods varying from 8 to 13 years; 26 had been in school 10 years; 14 had been in school 12 years; 13 had been in school 13 years, and so on.

Then looking down below in the next table we find the number of pupils that have taken these different trades: Thirty-two had studied shoemaking. Then we turn over to Table 8 and see how many are actually following the shoemaking trade at the time the question-

naire was sent out, and looking down these columns I do not see a single shoemaker in the list of 143, not a single shoemaker.

I see baking taught to 9, and 1 baker.

Carpentry and cabinetmaking was taught to 42. Under the head of "Carpenters" we have 3; cabinetmaker 1—3 and 1 are 4, out of 42.

Twenty-eight were taught printing. I look over the table to see how many are actually following the printing trade, and I don't see a single one. That seems a very astonishing fact to me. It seems as though there is something wrong with the figures, but still there seems to be no other interpretation.

Under "Tailor," 21 had learned the tailor's trade, and I look down here through the list of trades, and I see automatic hand workers, Ford Co., 1; laborer, 8; silk mill, 8; truck driver, 1; coal miner, 4; cigar maker, 2; chain maker, 1; foundry helper, 1; fisherman, 1; chemical manufacturer, 1; and so on. But I don't see a single tailor in the whole list. Now, that trade of tailoring was taught to 21 boys, and undoubtedly a great amount of interest and time was devoted to it, and the question naturally occurs: Was that training in the tailor shop the best all-around training that could have been given to these boys to fit them to go out and do the various lines of work that they actually followed? In other words, how should we modify our trade teaching to get the best results, if it is a fact that a majority of those that take trades as we teach them now do not follow them after school?

I notice the trade of bricklaying was taught to 10, but not one of the replies mentions bricklaying in the trades being followed.

The trade of painting was taught to 7, but no one of those replies mentions painting as the trade actually being followed.

So it seems to me that these being the facts, as revealed in the Pennsylvania survey, we should first extend our inquiry and find out what the facts are as to other schools—the Minnesota school, for instance, the Missouri school, and the North Carolina school. If half a dozen or a dozen of these larger schools would just take Doctor Crouter's questionnaire as it stands, or possibly add one or two questions to it and send it out to all their ex-pupils that are having their reunions from time to time, and get all that information exactly along the lines that Doctor Crouter has brought out, and if we should find that the facts are just as they appear here, then it seems to me that we should revise our industrial training accordingly.

Mr. TRAVIS. The first question was that of trade-language teaching. Mr. Tillinghast spoke of that, and there is another man here that I want to speak about it, to elaborate on the work of trade-language teaching in the New Jersey school. I would like to have him tell of us of his experience there. I think the Missouri and New Jersey schools are the only schools in the country which have attempted to have a special teacher for trade-language teaching.

Mr. J. LEWIS JOHNSON of New Jersey. We have been trying to develop in the New Jersey school shop language. We employ a special teacher for shop language and a special teacher for shop arithmetic. They devote all their time to these subjects in the shop. They have a schedule, which they follow from day to day, going about from one class to another, which provides out of a week of 10 hours in the shop 2 hours for language, 2 hours for arithmetic. We haven't the work very well organized yet. We have our notes on paper and

we are trying to get it organized, get it into intelligent shape to give out.

We follow a method something like this: My woodworking teacher, for instance, is working on a project embracing boats. Lately a class of eight boys has been very much interested in the development of motor boats. The trade instructor—the trade teacher—has trouble with the language. He can not make the boys understand what he wants them to understand about the construction of the boats. He takes the matter up with the shop-language teacher, and together they plan to overcome their language difficulties, and the next time the shop-language teacher has a period with that class he is prepared to try to solve the difficulties the shop teacher has had along the lines of language. He gets a boat. He brings it up to the desk—and I want to explain that this shop-language class is taken right from the benches to a corner of the room where there is a place prepared for them. They have desks there and plenty of blackboards. They bring the blackboards and the boats and the tools, and very often the shop instructor, right to this corner, and together they work out the difficulties.

The same method is employed in arithmetic difficulties and with drawing. That is about as far as we have gotten with it yet.

The first year language work in our shop classes requires the language teacher to teach the names of the different tools and materials, machinery, and equipment. In the first year the boys are in the shop classes we want them to get a vocabulary that we can work with. Then in the second year we begin to put over some language instruction, and in the third-year shop classes we expect them to get a thorough knowledge of the work they are doing. We expect to put over some instruction in English composition along the lines of shopwork, and we expect to teach them how to communicate with each other in writing, how to address a prospective employer for a position, and work of that sort.

We find the shop instructors in our schools do not object to having this system of a language teacher and an arithmetic teacher. We have found this to be the fact: That the shop instructor, the trade instructor—we call them "trade teachers," because we feel that they are just as much teachers as the teachers of any other classes—they do not object to having the language and arithmetic teachers help them, because they have a man-sized job when they are trying to put over their trade subjects, and they do not have the inclination to teach language or arithmetic, they don't want to teach it, and if they did want to teach it, in many cases they could not because they are not prepared to teach it; they are not trained to teach it; they are trained to teach their woodworking subjects, their printing subjects, or their domestic science or other subjects, and they are very glad in our case, in the way we try to put the thing over and in the way we are trying to organize the thing, to have the assistance of this shop language and shop arithmetic teacher.

MR. TRAVIS. Unless some one else wants to speak to this same subject, Mr. Steed has the floor.

DOCTOR TATE, of Minnesota. I want to speak on this subject, Mr. Chairman and gentlemen. I have but a few words to offer, and it strikes the most of us, I think, who have listened to and learned something at long distance about the New Jersey plan. Very few of the

institutions are financially equipped to back such a proposition as that. I know for Minnesota, and I believe I know for most of the other States, that we could not go so extensively into the manual training idea as the New Jersey school has done. It may be feasible; it may not be. It has not been in operation long enough yet, I suppose, Mr. Johnson, to settle the question as to whether it would be absolutely feasible or not, but it involves a large expenditure of money; a greater amount than is practicable for most of us.

Now, in connection with the language teaching, the trade teaching of language in the various industries, I may say that I have found a little pamphlet, which each of the instructors in the trades has written up, to be useful. They contain the terms, the various operations in all the respective trades, and they are given out freely to the children, so that language work in each of the trades is fairly well covered there. The instructors in that department are very much helped by the children having these little pamphlets to read and study and look over. That is, I think, a very good idea. We have found it to be practicable. It is not hard to do, and the instructor gets just as much language before his children as he wants them to have in the use of terms and in the names of the various materials used and in the processes that he employs in instructing pupils. So I think that is a right good idea. It is not the Iowa idea and all that, but it is an idea.

Now, I regard Sloyd as very good. All our boys spend two years in Sloyd, and we have an excellent teacher in that department. I regard that as one of the most valuable trades—it is not a trade; it is a preparation for a trade—that we have. It teaches the boy how to make simple things with simple tools, out of wood, and it teaches him another very valuable lesson, that he can make something. He is a little fellow, 9 or 10 or 11 years old, but he actually makes things, and I think all that is character building to start with, for a boy to be able to make something and point to it and say, "I made it." It makes him strong, it gives him confidence, and besides he gets information there. That information and the ability to handle himself and his hands fits him well to enter into any one of the several trades to which he may be assigned.

I would like to know how many institutions have Sloyd departments. Hold up your right hand.

(A number of hands were raised.)

MR. JONES, of Ohio. A great many have primary departments, but they don't call it Sloyd.

DOCTOR TATE. What do they do in these primary departments?

MR. JONES. Woodwork of all kinds.

DOCTOR TATE. I would like to have an opinion as to the value of sloyd. I think in some of the institutions they have none—I know they have none—and I so thoroughly believe in the value of sloyd as a preparation for a trade that I think it is worth emphasizing, and if we could add impetus to the favorable impression of sloyd in what we say in these few minutes, I think we will have made a large contribution to the benefit that will come from the industrial instruction that we give in our schools.

MR. TOM ANDERSON. Doctor Tate, may I ask you a question? How do you provide for two years of primary work and at the same time allow a new class to come in every year? I would just like to know that.

10 Doctor TATE. A new class coming every year? I don't know whether I know just what you mean. Well, I had better go a little deeper into that. I suppose

15 Boys, for instance, coming to school the first year are put in the sewing room. Now, that is girl's business they think and it is hard to get that idea out of their heads, but they do learn to darn beautifully the first year. I think that most of them can go home and teach their mothers and sisters how to darn. It is suited to them. They are little fellows, and they take an interest in it. There is something in the weaving of the stitches in darning that is interesting to a child and they take an interest in it, and if they are faithful and try and accomplish what we expect them to do the first year, then we let them out of that sewing room. We have them in there only one hour a day. We let them out of the sewing room into the sloyd room, where they are expected to stay two years. They are all delighted with sloyd. They are enthusiastic about it, and they make so many little things that they just fill their little trunks full of stuff that they take home to their fathers and mothers, who think they are the smartest things that ever happened.

20 Then we distribute our boys among the various trades, after consulting with their fathers and mothers as to what they would like, and consulting the boy as to what he would like. He has an opportunity of nesiing around among the trades in all of the three years he has been there, and he is usually able to decide on something he would like—some trade he would like to learn, and the fathers and mothers are consulted and the child is consulted, so that the end of it all is that he gets into the thing he likes best to start with.

But I find no trouble whatever in answering Mr. Anderson's question. It is a process of the school that every boy passes through this trade, and whether the boy has been in one or two years doesn't figure at all. He has reached age enough and has reached discretion enough, and all that, to go into the sloyd department regardless of his grade. He is in the primary grade yet, of course, so I don't see any complication that could arise with the question that Mr. Anderson asks. We have never had any trouble in that line whatever. The boy stays in the sloyd two years, sometimes a little longer. Then he is ready to take up a regular trade.

That is somewhat our instruction system, our system of trade instruction for boys.

Mr. TRAVIS. Now unless someone wants to speak to this question of trade-language teaching, we will hear Mr. Steed.

Mr. LYMAN STEED. I would like to clear up a few points in regard to this survey.

The first point I made in my paper this morning was this: In our own school the pupils graduated, honorably discharged, follow, in the majority of cases, the trade acquired at school, or some closely allied trade.

Going over to another point in the survey, some of the boys work at more than one trade while they are in the school. That gives us, instead of the total of 146 as mentioned in the outline, 160.

There was one point that was overlooked. That was this: All of the boys and girls have been following the trades for the number of years mentioned under No. 6. Now No. 6 of the report says this:

Seven shoemakers, 1 bricklayer, 2 bakers, 14 carpenters, 11 printers, 4 painters, and 7 tailors, making a total of 46 following their trades.

If you will look at the average time in school, you will find that there were 79 in school from 10 to 13 years. Now, take your time, as suggested here, placing a boy in school at the age of 10, and you will find that there was not very much time for a boy to actually acquire a working knowledge of his trade. So if you take 46 out of 79 who spent a good portion of their time in the shops, you will find that a very good average.

But the important thing to remember is this: If they finish the course, or if they have an honorable discharge, they usually follow the trade acquired at school or some trade closely allied to it.

Mr. TRAVIS. We have five minutes more now, if anyone has anything more to say.

Mr. BURTON DRIGGS. I would like to ask a question. In the teaching of trade language I don't know whether the teaching of the language precedes the project work or whether it runs along hand in hand with the project, and whether or not the teacher of trade language or the teacher of the trade uses the terms that are being developed by the teacher of language.

Mr. J. LEWIS JOHNSON. That depends a good deal on circumstances. In some cases the work given by the shop language teacher precedes the project. In some cases it goes along hand in hand; in some cases we complete the project, if it happens to be a project with which the pupils are sufficiently familiar—that is—in a language—if they can talk about it—then further language is developed after the project is finished.

Our language lessons are not very well planned as yet, but we are trying to get them arranged and will probably have them so by the beginning of September.

Is that what you want to know?

Mr. BURTON DRIGGS. Yes. I was wondering whether or not, in case you separate the two, you would have the language first or the project first. I think that probably the terms are more convincing, that is, will stay in the mind of the child better, if they are given at the same time while he is engaged in the project.

Mr. JOHNSON. We do follow that line as much as possible. As I suggested, we bring the boys, the language class, right up to the bench, and we work the development of the shop language along with the project.

Doctor HALL. May I say one word in regard to Mr. Johnson's paper? It seems to me there is one very important thing that he brought out that is worthy of very serious consideration, the question of reducing the number of trades in the schools to those that are most in use in the State or in the neighborhood, and not using these boys and girls to do the work of the institution, not teaching shoemaking in order to cobble the shoes of the children in the school.

Mr. JONES of Ohio. Mr. Chairman, Mr. Anderson, as I understood him, said that the industrial departments of the deaf schools are far behind the industrial departments in the public-hearing schools. I doubt that very much.

Mr. TRAVIS. I don't believe it.

Mr. JONES. I know a newspaper man made a survey of the industrial schools in central Ohio, and the last place to which he came, was the State school for the deaf. He told me in the presence of another newspaper man there that our shop was the only one where he found

the pupils really busy and doing something; that they generally lost time and wasted material in the hearing schools.

Mr. TILLINGHAST. I want to reinforce what Mr. Jones has said.

We heard a while ago about the Montana school taking eight prizes out of nine at the State fair; and we have had somewhat similar experiences in Oregon. The institution was not allowed to compete for prizes, but we had our work put up right across the hall from that of the Agricultural College, with the work of high schools from all over the State exhibited. We showed people our manual-training work, then took them around and showed them the high-school work, and I was perfectly willing for anyone to make a comparison between the two.

I will say this, however, I think possibly in the public schools we hear a great deal of theorizing and expounding as to how to conduct manual-training work, to have it all systematized. In theory it looks fine, but they don't look after the individual to the extent that we do. The individual doesn't get the amount of time in the shop-work, the amount of individual training that our pupils get, and therefore equal results are not attained. There is too much mass teaching and too little individual instruction in the public schools.

Mr. BJORLEE. In Mr. Anderson's paper I heard one expression which sounded very familiar to me. It was this, that we aim to make of our graduates self-supporting elements of society immediately upon stepping out into life. I believe that came from the biennial report of the Maryland school for 1921, and I want to say that that is our aim. Perhaps we fall short of it, but it seems to me that must be our aim.

Perhaps a word of explanation here would be appropriate. According to law we take in children from 6 to 18 years of age, but if a boy comes to us 10 or 12 years of age, we are very willing that he shall stay and complete his trade course, especially if he is deficient in language and his other academic training, we feel that it is even more important that he should get the special benefit of a trade; consequently he may not leave us until he is 21 years of age, and it seems to me that we ought to expect, if we keep a boy until he is 21 years of age that he should be a self-supporting man when he leaves school.

Two years ago we sent two of our boys from the printing office to New York to take a linotype course, and while they were completing that course they earned from \$30 to \$47 a week, respectively, in print shops. I think they may serve as illustrations of our self-supporting young men.

Mr. BURTON DRIGGS, of North Dakota. We had one pupil who earned \$40 a week last summer.

Doctor HALL. Before we adjourn there are one or two announcements that I want to get to all if I can.

In connection with the matter of customs I would like to ask Mr. Thompson, who had some material that he brought over here through the customs office, and Mr. Steed, who, I think, has a good many exhibits, and anyone else who has exhibits that have been brought across the border, in fact all who were in charge of opening these up and placing them here will also be able to stay long enough to attend to getting them together and preparing them for shipment back, because the bursar of this institution is under bond that all these

things will go back across the border. It was understood that they were to be brought over here simply to be shown, not for sale or anything of that kind, and that they will go back into the United States. Of course with those that come from schools in this country we will have no trouble; but I hope those in charge of things that came over the border will see that they get back promptly, so that the bursar of this institution will not get into difficulty with the authorities here. He is under bond that all these things that have come over the line shall go back to the United States.

Just one other suggestion. It may be that some of the people who have been here and have enjoyed the hospitality of the institution may care to leave some little token in connection with the service in the dining room to these young boys who are employed as waiters. They are all local high-school boys. It may be wiser, if you feel like leaving any such compensation or honorarium to give it to Miss Ford instead of giving it personally to some one boy, and let Miss Ford distribute it among these helpers. I think that would be a better way to do it.

(Whereupon, at 12 o'clock noon, the convention adjourned until 2 o'clock p. m. this day.)

FRIDAY AFTERNOON SESSION.

The convention reassembled at 2 o'clock p. m., Dr. Percival Hall presiding.

Doctor HALL. The convention will please come to order.

I will ask the chairman of the aural section, Miss Coleman, to grant a few minutes to Mr. Haycock, of England, between one of the papers, for a short statement about the plans of the teachers in England for a meeting some time in the next year or two. I think he wants about five minutes.

I see Mr. Haycock is present. Mr. Haycock, would you prefer to make this announcement now or wait and take your chances on presenting it to more here later?

Mr. G. S. HAYCOCK, of England. I would prefer to do it later, I believe.

Doctor HALL. Very well. Will you take the chair, Miss Coleman?

AURAL SECTION.

(Miss Grace D. Coleman presiding.)

MISS COLEMAN. The first paper on our program this afternoon is on the method of testing hearing, by Dr. E. L. La Crosse. Doctor La Crosse has been very generous in his devotion of time to this subject, and the committee feels sure that whatever he has to say this afternoon will be very welcome.

Doctor LA CROSSE. Madam Chairman, may I preface my remarks with just a few words? It has been my privilege while here to do a little simple demonstration work on two different occasions, and at each time we have tried to emphasize the fact that it was comparatively easy to do this work, and to the teacher I will say this afternoon, please do not let anything that we may say—have to say—on the method of testing hearing discourage you from your determination to continue with the work of auricular training as we have tried to do it, because this afternoon we primarily must appeal to the heads of

schools from whom we are hoping to secure the cooperation that will make possible the standardization of terms relating to the degree of residual hearing, and in bringing this matter before a body of men such as we have, men of years of experience and men who understand the deaf and the importance of this work, I feel that we must bring to them, we must show them, that what we are attempting to do is practicable and has been gone into by men who must have their respect—referring not to myself but to the physicists who have worked it out for me—and for that reason you will pardon anything that may seem of a technical nature, and do not let it discourage you in the determination to do the work, because you all use your automobiles, and yet you do not pretend to understand the complicated gears that run them.

THE METHOD OF TESTING HEARING AND THE STANDARDIZATION OF TERMS AS APPLIED TO THE TRAINING OF RESIDUAL HEARING.

By Dr. E. L. LA CROSSE, Wright Oral School.

It is indeed pleasing to see the continuous and increasing interest manifested by schools for the deaf in the general subject of the development and training of residual hearing. The subject is assuming such an important place in our school curriculums that many of us have, for the past few years, felt the growing of a better terminology as applied to the children doing this work.

The quantitative and qualitative tests of the aurist, given primarily for diagnostic purposes by means of tuning forks, whistles, acoumeter, watch, etc., do not fit our needs where we require to know the more or less objective amount of hearing as compared to the normal, in order that we may assign to the pupil in an auricular training class the work most suited to his requirements.

Writing in the *Laryngoscope* of May, 1923, Doctor Gesberg says: "The charting of hearing results with forks, as is generally done at the present time is a very relative matter, and, while the general result is appreciable to others, the exactness of finer gradations is entirely lost. Such notations as 'Bone conduction increased,' 'Air conduction decreased,' or 'Lowered high-tone perception,' etc., qualified by 'slightly,' 'moderate,' 'marked,' etc., give a relative appreciation to another observer, and while they are probably sufficient to make a diagnosis in a given case they are not sufficiently accurate to show any but gross changes occurring in the patient's hearing as found at a subsequent examination either by the original, or by another observer."

In other tests, such as the watch, voice, and acoumeter, in which measurement is made according to the distance the sound is heard from the ear, many factors are present which vary the results. Dr. John Guttman, of New York, calls our attention to the fact that in most of the methods now in use we do not measure directly the amount of energy necessary to arouse the sensation of hearing but rather we measure this intensity indirectly by increasing or decreasing the distance between the source of the sound and the ear of the pupil.

In the teaching profession we have had for many years several terms by which we are wont to designate different classes of pupils who have some residual hearing. Those in most common use are "Hard of hearing," "partially deaf," and "semideaf." Some time ago I sent out letters to the superintendents and principals of our schools in the United States, and their replies confirmed the opinion I had had; namely, that we did not all have the same thing in mind when speaking of a child as being partially deaf, hard of hearing, or semideaf.

Mr. A. in a western school replies that the term "partially deaf" means to him one who is able to understand spoken language when the utterance is near or quite loud. Mr. B. of an eastern school writes that under the classification "partially deaf" he would place all those who have hearing enough to be of some value in the correction of speech defects. Mr. C. of a southern school writes as regards the terms "partially deaf" and "hard of hearing," "These terms are self explanatory." The reply received from the late Doctor Argo is so characteristic and so apt that we would like to insert it here: He says:

"I do not see how you could so word your sentence as to differentiate between 'partially deaf,' 'hard of hearing,' and 'semideaf.' With all the explanation you might make, some people will use them one way and some another. If you were to write an article using those terms and wanted to be absolutely exact, you

would have to explain the terms at the beginning of your article by saying that 'In this article this means this, this means this, and this means this, please keep in mind.' Then each time you used the expression you would put in parentheses, 'See explanation at head of this article.'

Dr. Emil Amberg, of Detroit, has been much interested in this subject of classification and several years ago suggested three divisions which I thought might suit our needs. With some slight changes in his groupings, so as to make them apply to our particular requirements, I suggested, two years ago, the following:

1. Slight deafness: Those who can not hear ordinary conversational tones farther than 6 feet.

2. Severe deafness: Those who can not hear loud conversational tones farther than 2 feet.

3. All others who can not hear loud conversational tones farther than 6 inches.

Dr. A. C. Hill, inspector of special schools for the commissioner of education for the State of New York, in his annual report, quotes this classification and adds, "Perhaps this standard of measurement will answer until a better one is devised. A uniform measure, even though it is not very exact, would help greatly in grouping pupils for the most effective work."

During the past few years we have been interested in the experimental work being carried on by Doctors Dean and Bunch, of the University of Iowa; Doctor Wilson, of the University of Illinois; Dr. John Guttman, of New York; and Dr. Harvey Fletcher, of the research laboratory of the American Telephone & Telegraph Co., all working with the idea of developing an electric audiometer or audiometer. About this time one of our patrons, an electrical engineer, became much interested in the possibility of using a sound amplifying apparatus as an aid in the education of his young son. An attempt to test the hearing of the little fellow in the research laboratory of the Western Electric Co. with an audiometer which had a frequency range from 64 to 16,384 and an intensity range of approximately one hundred million million, divided into 28 steps, did not give satisfactory results, so Doctor Fletcher had an experimental set made up, which, while not exactly a pure tone, had a frequency of about 810. This set was arranged with 5 intensity steps, which we felt would represent the difference between total deafness and a degree of hearing that necessitated special instruction. In this first instrument the steps were numbered 1, 2, 3, 4, 5, the lowest number expressing the least intensity. We were allowed to use this instrument for nearly two years, during which time we secured data on about 60 different pupils. The reading would be as follows:

John Jones: November 1, 1921—R. 1, L. 3; February 1, 1922—R. 1, L. 3, etc.

Richard Smith: December 1, 1922—R. 3, L. 4; April 1, 1923—R. 3, L. 4.

These readings were made in terms of the numbers indicated on the dial. Only recently were we able to get this instrument calibrated and these arbitrary symbols reduced to percentages of hearing for an 810 frequency. The calibration of this experimental audiometer was made in the research laboratory of the American Telephone & Telegraph Co. by means of measuring instruments which show the amount of current used compared with the napier chart for the readings for 810 intensity.

The great value of this instrument in our teaching was that from the data we had secured we knew at once what we wanted to attempt to do for a pupil who had, for instance a reading of 5 in the left ear and 3 in the right. We knew what to expect from a pupil who had a reading of 2 in either ear. We knew whether it would be advantageous to outline auricular work with the idea of building a hearing vocabulary or whether work should be outlined solely with the idea of improving the pupil's speech. It is not our intention here to go into details showing how our course was guided by these readings but merely to suggest that these data indicate the course which should be pursued with any given pupil, leaving it to the individual school to adapt to its pupils the courses which its facilities afford.

These arbitrary readings, when calibrated, were assigned percentage values as follows:

	Per cent.
No. 1.....	35
No. 2.....	23
No. 3.....	18
No. 4.....	9
No. 5.....	feeling point or 0 hearing.

Thus far I have spoken of the first and rather crude audiometer that we used. Because of the data we had and because we felt the need of something which would measure even greater degrees of hearing than 35 per cent. Doctor Fletcher has designed the instrument which I have here to-day. This differs from the original in that it is not a pure tone but is made up of several tones with a predominant note around 600 and also registers for the first time in percentage directly on the dial.

The following is a technical and detailed description of the apparatus:

The generator is of the vibratory reed type. It gives a compound tone of variable intensity. An analysis of this tone shows that it has frequency components throughout the important range of speech frequency, that is, from 200 to 2,000. The zero hearing point is taken as the average intensity where one feels the sound wave. The 100 per cent hearing point is taken as the average threshold intensity for people who are known to have normal hearing. The range of intensities between these two points is divided into 100 equal loudness stops. By means of the large audiometer in use in the laboratory of the Western Electric Co. an accurate measurement was made of the range of hearing in intensity and frequency for persons with normal hearing, and the final results were plotted in the form of a graph, where the abscissae represent frequencies which are expressed along the axis, and the ordinates represent intensities which are expressed both as amplitudes of pressure variation and as loudness in loudness units. The lower curve gives the threshold of hearing, and the upper curve the threshold of feeling. Their intersection points are the upper and lower limits of audibility, and the area inclosed between these two curves has been called the "auditory sensation area." On a complete audiogram the threshold of hearing curve is represented in its relation to the normal auditory sensation area. The fraction of the normal auditory area above the abnormal threshold curve is taken as the per cent of hearing, since it represents approximately the number of pure tones available for the deaf person's use as compared with those available for the average person with normal hearing. The audiometer here shown is designed to give quickly an approximate value of the per cent of hearing as here defined.

This machine was not completed until very recently, so I have not had as much time as I should like to make all the readings that I had made with the original, but from those I have made of the same pupils I find that the percentage of hearing as indicated on the dial corresponds in the main with the calibrated percentage as given by the original instrument.

We have long held to the theory that our auricular work with pupils does not do much toward increasing the actual amount of objective hearing, but that it produces results by training the individual to interpret the imperfect auditory impressions in terms of action and thought, so that he is able both to give a quicker response and to interpret or "hear" at a greater distance from the source or with less intensity. To support this theory we would like to offer the complete audiogram of a girl who came to us in October, 1921. When we tested her hearing we discovered such a large amount that we felt a hearing vocabulary could soon be built up. We were anxious to get a complete chart of this, so had a complete audiogram made showing the percentage of residual hearing at the various frequencies from 64 to 8,192. This audiogram showed that she had about 45 per cent along those frequencies used for speech. At this point I will add what was written to me by her father at the time:

"From early childhood she learned to read lip movements so well that, aside from speaking loudly enough to attract her attention, we have not made her use her hearing, as I now realize we should have done. I think that when she came to your school she was entirely unable to comprehend conversation by hearing."

Auricular work was continued with her throughout the session and again when she returned to us this year, with the result that this girl of 18 can now carry on an ordinary conversation without the use of her eyes when the speaker is not more than 2 feet away and uses a normal conversational tone.

Another complete audiogram was made this year in February, and no appreciable difference was found in the amount of residual hearing as we might have been led to expect from the great improvement in her interpretive ability.

The method of using the instrument is very simple. For cases where there is less than 50 per cent of hearing it will not be necessary to take the dial out of the box, but in cases where there is more than 50 per cent of hearing it is better to place the vibrator in a separate room so as to remove the sound of the vibratory coil as far from the pupil as possible. We have found it best to turn the dial to the point showing only 10 per cent or 15 per cent of hearing and press the interrupter button, thus making a sound of sufficient intensity to enable the

pupil to know what to look for. It is well to show the pupil that when he hears such a sound he is to press the button which he is holding and which will light the signal lamp. We have found in some cases that pressing the button and seeing the light distracts the pupil's mind, and we simply ask him to nod his head when he hears the sound.

We usually start with the lesser intensity and work up to the greater ones—that is, moving the dial from 100 toward 0. Quite often we find that if we press the interrupter at certain intervals the pupil will expect it at that interval, in which case we vary the interval. A little practice will so familiarize one with the instrument that he may depend very closely on his readings as representing the objective amount of hearing of the individual tested.

We feel sure that anyone engaged in the work of training the residual hearing will see the great value of such an instrument, and we offer here the suggestion that our work will be advanced and its effectiveness increased if we adopt some such universal measure of hearing.

Doctor LA CROSSE. I think we all do not know—at least I did not, anyway, until five or six years ago—where the human voice was. I looked through books and read and studied and asked people and they said, "Why, I don't know. It is somewhere along middle C, an octave above or an octave below." But now they know exactly. They can take your voice in the laboratory—my voice that I am using here—put it through the measuring instruments, find the amount of intensity I am using, then I can speak like this and they can put it through and get the comparative intensity. That is possible, isn't it?

They can also find exactly the pitch of the note that I am using. Am I talking in an 800 pitch or 1,000 pitch when I am talking this way? They can get it. It will show exactly on the measuring instrument. It is possible to do those things.

They have found that we hear from 16 up to about 20,000. Middle C is 256. We hear from about this point up to here in the range [indicating]. What is the note of 16? Does anyone know? I did not. What does the note of 16 sound like? What does the note of 20,000 sound like? Now I will tell you what I have found out, that a note of 32 sounds something like this [rough whisper]. The note of 10,000 sounds like the note of a canary, as I have carried it in my mind from the office, where we have a canary, down to this laboratory, where they have an audiometer. But we could find out exactly what the pitch of that canary was if we wanted to know.

The energy used to give hearing at the point of 16 is of a certain amount. How are we going to measure it? It is best measured by the electrical unit, a dyne. Here we would have a scale showing the different amount of dynes used. There is a 1-dyne [indicating]; next we have one-tenth of a dyne, one one-hundredth, one one-thousandth, etc. With the audiometer we might use the 16 frequency. That is what we call the "threshold of audibility." [Indicating on chart.] It takes at that point an according amount of electrical energy of dynes to hear at that frequency. Then we find the number of dynes it takes to feel at 32, and we get another point here, and we get this running up here something like that [indicating].

Now, suppose we come to an abnormal voice. We take a child with imperfect hearing, we take him at 16. We find it will take more or less than that, and right on through. His curve would probably run along here, something like that [indicating]. That is the abnormal curve, you see, of the defective hearing. What is left is the number of pure tones available to the person, or this is the percentage of hearing [indicating]. He has lost this, and this is what is left.

Now, that is the basis on which it is made, and I am hoping that that may be enough explanation, because I know just how tiresome this technical matter is.

Some of you people may be curious to test your own hearing.

Doctor DOBYNS, of Arkansas. I would like to.

Doctor LA CROSSE. I have tested a great many of our own people, but the fact is, you know, that an adult can have 30 per cent reduction in one ear without being inconvenienced very much, except when the poor ear is turned directly toward the sound, or he is lying on the good ear.

Now if you will listen carefully I will turn this note on full and you can hear it all around the room. This is a sound which placed close to the ear would indicate no hearing at all if it could not be heard. Of course the sound that indicates perfect hearing you could not hear unless the room was absolutely quiet and this [receiver] was close to your ear. We could not have any other sound in the room if I wanted to test you for 100 per cent hearing.

This is the 30 per cent point. Can you hear it? You can not, for there is too much other noise in the room.

That is the instrument. Now we are ready for any practical work that you ask. If you want to we will first test five or six people whom we suppose to have normal hearing to see whether the men who made this have been exact in getting our 100 per cent point, and then we will test the children of different degrees of hearing. What shall we do first? It is your pleasure, and we want to do whatever you ask.

Mr. JONES, of Ohio. I would like to see a few people tested here. I would like to be tested myself. I am slightly deaf in my left ear.

Doctor LA CROSSE. All right, come right up.

(Mr. Jones ascended the platform and was tested by the audiometer, (Doctor La Crosse) announcing that he had 80 per cent of hearing.)

Now what we would like to do is to test some one who has reason to suppose that his hearing is absolutely normal; who has never had any indication that his hearing is below normal. Now, I can hear that at 100 per cent. Half a dozen of my people get it at 100 per cent. I have tested people as low as 10 per cent. But the 20 per cent that Mr. Jones is down doesn't bother him a great deal, except he doesn't have the results from that ear.

(Mr. Jones had 80 per cent hearing in the left ear.)

I will now try Mr. Tillinghast.

(Mr. Tillinghast was tested.)

Mr. Tillinghast has exactly 100 per cent in the left ear. Once or twice he thought he heard, and he pressed the button and I tried him over again. It takes concentrated attention to make the test.

If when that note is going the least little sound comes in, it disturbs you and you don't get it. The test should be made in a perfectly sound-proof room.

Mr. GOODWIN. I would like to try it.

(Mr. Goodwin was tested, Doctor La Crosse announcing that he had 80 per cent hearing in the left ear.)

Doctor DOBYNS. I would like to try it. I know I am deaf, but I want to know how much.

(Doctor Dobyns was tested.)

Doctor Dobyns has 80 per cent. That is about what should be expected, I should say, of a man of Doctor Dobyns's years.

I am going to ask Miss Timberlake now if she wants to come up. (Miss Timberlake was tested.)

Miss Timberlake has 65 per cent in the left ear.

The right ear is very much better than the left.

MISS TIMBERLAKE. I can't use this ear with the telephone with any degree of satisfaction. I can do it, but it is very hard and I always use my right ear, so I know it is better.

Doctor LA CROSSE. Well, you have trained your right ear with the telephone. If you had persisted in using the left ear with the telephone you probably would be able to use it also. They show up about the same in the testing by the voice.

Now, gentlemen, we are going to use this instrument for testing little children, and the question you will ask at once is, "Is it possible to use it with little children?" It is possible to use lots of things with adults that you can't use with children, but it is possible to use this with children.

I would just like to show you some children that we can use it with.

Here is a boy that we tested out the other afternoon and found that he had about 60 per cent hearing. I think it was; this is a usable amount, a very great amount for use in auricular training; so much so that we would hope, after auricular training, to take him and put him out in a school where he would be with hearing pupils. Just listen to his voice.

MR. HAYCOCK. What is the lowest degree of hearing, Doctor La-Crosse, that a boy should have if he is to remain in an ordinary hearing school?

Doctor LA CROSSE. I don't know. No one has yet said. The law of New York reads, doesn't it, Doctor Taylor, that pupils can not be successfully taught in the public schools can come into the schools for the deaf?

Doctor TAYLOR. There is no definite law on the subject. I know that is the interpretation that is accepted by the Department of Education.

Doctor LA CROSSE. It is going to be a big question to determine the schools for the deaf and the schools for the partially deaf, and that is where this instrument will be used as a basis for determination. That is what we are looking for.

(A girl was tested, showing 28 per cent hearing in the left ear.)

Now, it is a big problem, when you think of going into it, what 28 per cent hearing means. What can be done with it? This is the basis that tells us what we are going to do with pupils of 30 per cent hearing. It is the basis upon which Mr. Caldwell of California can write me that he has a boy there who wants to come here—wants to come East. He has 25 per cent hearing. What should be done with him?

A man in Norfolk, Va., told me the other day of a girl there who had 50 per cent hearing, as stated by the surgeon, and he wanted to know if her education should be different from that of the totally deaf child. I told him certainly it should be different. He came to New York, and what did he find? That the little girl had 15 per cent of hearing.

Doctor DOBYNS. How did they test the hearing?

Doctor LA CROSSE. I don't know. We had a little boy this morning with 15 per cent hearing—little Jimmie, I think it was. We tested him and found he was able to get the difference in vowels. That amount of hearing, of course, means considerable.

Mr. HAYCOCK. What is the lowest per cent of hearing that you can work with?

Doctor LA CROSSE. In our particular situation in the Wright Deaf School we work on 5 per cent hearing. That does not mean that in the large schools it would be worth while to work on 5 per cent hearing.

This girl that we are now testing would be worth working with. She has enough hearing to make it worth while.

Miss TIMBERLAKE. You mean at your school or some other school?

Doctor LA CROSSE. Any school. I think this girl with 30 per cent hearing, with training ought to be able to get conversation eventually at a distance of a foot and a half. I don't believe that this girl would ever be able to get conversation at a distance of 5 feet, but the hearing vocabulary at a distance of a foot and a half, together with the advantages that would accrue from particular training for the correction of speech, is a wonderful thing for that girl and it places her in an entirely different class from a totally, congenitally deaf child. There will be no comparison in her voice when she finishes school if she gets auricular training with that of a totally congenital deaf child.

Doctor CROUTER. You say it is a wonderful thing. In what way is it wonderful?

Doctor LA CROSSE. For one to have 30 per cent hearing, Doctor Crouter, as compared with one with no hearing. It is a wonderful thing for her that she has that amount of hearing.

Doctor CROUTER. You mean wonderful in the results?

Doctor LA CROSSE. I mean a wonderful thing in that it is worth a great deal to her.

Doctor CROUTER. Wonderful in the effect it will have on her speech?

Doctor LA CROSSE. Upon her speech, exactly, upon her psychic acoustic sense, the outlook she will have upon life. It is a grand thing for her that she has it, if it is trained.

Mr. BOOTH of the Nebraska school. With the amount of hearing that she has, if she hears persons talking to her as well as looking at their lips, will it help her in interpreting what she sees?

Doctor LA CROSSE. She probably will not be able to hear a person speaking to her in a conversational tone at a distance of 5 to 8 feet. I don't think her residual hearing will carry much more than a mere rumble at that distance, but we have found—I know you have—that a mere rumble to lip readers means a great deal. I don't know why it is. In teaching adult lip readers, absolutely our rule is to use voice; to get to the point where they can not get information from the voice, but to get the rumble. It helps. I doubt if she would get much sound if I spoke to her "good morning." She would get very much of a rumble.

A VOICE. If you get 30 per cent now is it possible by training to test her out in, say, a year or two years from now and find she has 35 per cent?

Doctor LA CROSSE. I don't think so. We have a child in New York that has made a wonderful showing, a girl who came to us in October, 1921, with 45 per cent hearing, but the father wrote me that she had never used that hearing at all. We gave her training for two years, with the result that at the end of that time she was able to understand conversation through the ear at 5 feet. Her hearing vocabulary caught up almost with her lip-reading vocabulary, yet at the end of that time we had another chart made and it runs—the lines run practically the same. That would be the first line [indicating]; the second line would run just about like that [indicating]. I think that settles forever the argument that we are increasing the objective amount of hearing. We have said that we are giving an increased mental power of interpretation.

Mr. BOOTH, of the Nebraska school. Does it mean that you are educating the hearing and not increasing it?

Doctor LA CROSSE. Mr. Booth, it means whatever word you want to apply to it, "education," "development," "training," whatever word you want to give to it. Educating, yes; I suppose so. Developing but not increasing the objective amount of hearing.

I mean simply this: That if this girl has 40 per cent to-day, after two years' training she probably will have 40 per cent. That is exactly what I mean expressed in clear, plain English, as plain as we can get it. You can call that education, development, training, or anything you want to. It doesn't make any difference, but we are not proceeding with the idea that we are going to give to this ear anything more than it already has.

Now we do find this, that a little fellow who has never had any training at all, ought to be stimulated for a few weeks before you get a final test on him. You might test him to-day and then stimulate him with instruments or the singing voice, as Miss Anderson is doing with a piano, with all kinds of instruments, then test him out and get your final test. But this little fellow has had all that stimulation, you see.

We hope, gentlemen, that this will prove so interesting that the matter will be taken up and that we shall have a standardization of terms for speaking of the amount of hearing.

Mr. HAYCOCK. What does that instrument cost?

Doctor LA CROSSE. What does this instrument cost? What has it cost? I don't know. I suppose it cost a couple of thousand dollars, maybe. They wouldn't tell me at the Western Electric. This is the only instrument made. The manager said he had had inquiries about what it cost. He would not tell, but he intimated that they would probably be able to make them for two or three hundred dollars. That is the most I can say.

Miss COLEMAN. We had hoped to hear from Miss Van Adestine on a method she has for teaching partially deaf children, but I am afraid our time is getting so short that we will have to put it off until the end of the afternoon.

Miss HENDERSON has for several years been working with musical vibrations to stimulate latent hearing, and we are going to hear her now. Miss Henderson, assistant principal of the Horace Mann School of Boston.

Miss HENDERSON. Madam Chairman, ladies and gentlemen of the convention, I want to express my very great pleasure at having heard Doctor La Crosse this afternoon, because I think the instrument that he has demonstrated is one that we surely need.

THE AWAKENING OF LATENT HEARING BY MEANS OF MUSICAL SOUNDS AND VIBRATIONS.

By Miss JENNIE M. HENDERSON, Assistant Principal Horace Mann School.

I thank you for the courtesy extended to the Horace Mann School in inviting me to be with you this afternoon to speak upon a subject which is occupying a very prominent place in the school program of to-day.

Through all my teaching of speech to our deaf children there has always been an underlying principle of procedure which I have set up for one of my cardinal rules. I felt that I must find out in some manner just how much hearing a pupil had and in what measure I could make use of it in training a child's voice to approach more nearly that of the normal. I felt impelled to try my utmost to make the child hear some tone of the human voice. I was not always willing to take for granted the report of the aurist, because I had found by experience that it is very difficult for the otologist who is examining a young deaf child to determine upon the exact degree of hearing. The little pupil wishes to satisfy the aurist and many times intimates that he hears when such is not the case. Very often the child makes no response when we, as observant teachers, know that there is a little hearing.

From its earliest years the normal child is experimenting with sound. Noises and sounds are all about him. They vary in intensity, quality, pitch, and volume. Bells ring, drums beat, whistles blow. He hears dogs bark, cats mew, birds sing. People talk, laugh, whistle, and sing. He likes to imitate the various sounds and noises. Pounding the piano, blowing a horn, beating the drum are pleasurable to him. He likes to clap his hands and stamp his feet.

From all these noises and tones the child soon differentiates the sounds in which he is most interested, and from these he develops certain hearing concepts. The impression of each sound is transmitted by the auditory nerve to the brain and is there recorded and recognized. The child is aided in his selection by his proud parents, who encourage his early attempts at speech.

Such a conscious reproduction of sound shows vital growth in the development of the sense of hearing. This hearing concept persists and finally shows its reaction in the reproduction of a certain sound on a certain pitch, accompanied by a degree of volume, time, and accent. In order to reproduce these tones, the whole mechanism of the speech organs must be set in motion. To complete the reaction, the child intuitively judges the result. He constantly repeats the tone or sound until the desired end is gained or until he is satisfied by the action itself.

If we wish to awaken dormant hearing in a deaf child, the process is slower but very similar. Different sounds will produce different reactions. The child goes through the same method of building up hearing concepts. To certain tones he will react; to other tones he will remain indifferent. He goes through a process of selection. In this he is aided by his teacher, who starts with the simple vowel sounds and leads him on to differentiate between them and to proceed from single tones to those more complex, until finally he has had built up for him a hearing vocabulary of words and common expressions, varying in intensity, duration, pitch, and inflection.

During the speech lesson, time has always been taken with individual pupils for the purpose of finding out some way of making them conscious of voice. I never tried shouting into the ear. We know that forced sounds, aside from their lack of carrying power, may do incalculable harm in injuring the delicate drum membrane. Because I knew that the pupils could not react to the spoken word, I formulated a theory which made use of a singing tone which had great carrying power and consequently a good vibration. If the nerve of hearing is not destroyed, the pupils always respond to the vowel *ee* sung on the octave above middle *d*. When a child first gets the tone and is conscious that he hears, the expression of happiness which appears on his face is reward enough for all his teacher's repeated efforts and makes her eager to go on with her research and trials.

My work in auricular training started from this humble beginning, and it is a direct outgrowth for the need I felt for better speech and well-modulated voices.

A true teacher must always have in mind a particular aim to guide her in her chosen work. It is so easy to deviate from the right path.

The aim of auricular training in an oral school is a natural one, namely, to so train a child's latent hearing that he will be able to hear the human voice, and as a result of this will be able to receive correction and criticism from the teacher in an intelligent manner and in a perfectly normal way.

1. He will be able to place his voice high or low, increase or diminish its volume, or, in other words, modulate and inflect it. He will be able to put the accent in its proper place, subordinating the nonimportant words of our language to those more important.

2. He may be able to hear the voices of his family and friends so that he may know them and differentiate between them.

3. He may be returned to the world as hard of hearing rather than deafened.

The Horace Mann School has always believed in the educational value of rhythm in the work for the deaf. For many years the children have been used to the stimulation of musical vibration. It is gratifying to note that most schools for the deaf are now making a place for rhythmical work in the curriculum.

Results gained from this work have more than justified the trial, by the fact that children who have been trained to respond to musical vibrations have surely approached more nearly the normal type of childhood in many ways.

1. Their voices are more natural.

2. Their movements in walking are lighter and more graceful instead of being awkward and shuffling.

3. They are more alert.

4. They have a better time socially, because they have some knowledge of what their hearing brothers and sisters are doing and because they have been trained to respond to the rhythm of the dance.

We have no right to cut off the power and influence of musical vibration from any child. The rhythmical feeling is there. If we do not find it at first, it must be educated and brought forth until we see the growth.

We must not close doors to the partially deaf who come to us from the schools for hearing children. They need the stimulus of music. It is a great misfortune for them to lose the sound of the singing voice and the music of the piano. The lack of music in schools for the deaf has made our teaching very difficult. We must be grateful for the general advance which has been made in this respect. We do not intend that our children can be singers in any sense of the word, but we do intend that they shall be given a chance to be stimulated by music and to come to accord in rhythm with other children either in the physical training period, in games, in dancing, with the school orchestra, or chanting or singing at the piano.

A true community spirit is fostered and engendered by concert work in music whether in singing or playing. Absolute uniformity of time must be kept. That "music hath power to charm the savage breast" is a very evident fact.

Is it possible for a deaf child to change the pitch of his voice? Some children are quicker to take notice of a change of pitch than others. A teacher sings to her pupil while the hand of the pupil is resting lightly on her chest. Sometimes a child can be made to realize a change in his own voice while he is laughing. I am sure that this matter of inflection and change of pitch holds great possibilities for the deaf child. I know from my own experience that a deaf child can be taught to sing the scale, and that many can be taught to raise the pitch of the voice, one, two, or three intervals. Much individual work is needed to attain this.

A few years ago I made an experiment with a little boy whose name was Eric. He had been in the school for four years. During that time he had been examined by our special surist at different periods, and, at the last examination, when he was 8 years old, we found that there was no perception of sound in either ear. At that time I was very anxious to prove that a totally deaf child could be trained to sing the scale. I worked and worked with a number of children, but finally selected Eric for individual instruction. Every day, when his class came to me, I tried to change the pitch of their voices. I took Eric, and placing the finger tips of his right hand against my sternum, and his left hand against his own sternum, I sang the syllable *ah* instead of saying it. Over and over I did this. He said "ah." To my delight it was musical, but of lower pitch. I immediately changed my tone to the same pitch, and together we gave the same musical sound. We both felt the vibrations which surely synchronized with each other. The boy was pleased and I was delighted. I tried the octave, but got no response. Then

I sang the interval 1-3, calling it doe me. As I sang I moved the boy's fingers a little higher on my chest. That was to convey to his mind the idea of higher pitch, and I thought that he might be able to feel the vibration better. After repeated efforts the boy gave the tone correctly, and we felt that the vibrations in our chests were identical. Later I sang the interval 1-5, always working with one of the boy's hands on his own chest and the other on mine. The vibration was felt in the sternum.

When I found that Eric could really sing 1-3-5 I knew that we could sing the scale as far as 5. From this step on, we worked until he could give all the notes in the scale. The boy's voice was very pleasing and of good quality. All of this time he showed no sign of having heard a sound. We always worked together with his hand feeling the vibrations in my chest. It was wonderful. I tried the same thing with other children, but none were as satisfactory as Eric. His voice was pure. The school program does not allow much time for individual work.

But the best thing was yet to come to Eric. The work in rhythm helps to awaken latent hearing in many instances where the auditory nerve is not destroyed. There are a number of the children in the school now who hear a great deal more than we ever thought they could or would. The work at the piano has kept them alert. It has made them sensitive to vibration transmitted through the bony media of the body.

At the same time I was working with Eric's voice, he was playing the triangle with my little orchestra. The work with the triangle and the piano had made him keenly susceptible to vibration, and had aroused the sense of hearing which had probably been dormant for years. When the auditory nerve is not destroyed, there is a possibility that a certain amount of hearing may be developed. I shall never forget the day when I first heard him say, "I hear the bell," or the times when he turned his head at shrill noises. I began giving him sentences with different inflections, which he imitated. Later, he heard automobile horns. He heard the band when the Ancient and Honorable Society were marching a block away. Then came a day when he objected to the loud voice of a classmate. He would say, "Henry is not using voice. Henry is using voice."

He could follow me as I sang a song. I did not teach him to read the notes perfectly, but he could have accomplished this if he had remained at our school.

All these different experiments show what a great field for work there is among our deaf pupils. Not all can do as well as this boy, but the possibilities are great. We must keep on striving to improve our methods. Keep the child listening. Play for him, and sing to him. Both speech and hearing will be the better for it. As a means of spiritual education, music is unsurpassed.

At the time of the "Yankee Division" parade, song sheets, containing the words of the songs which were to be sung during the march, were printed in many of the Sunday papers. The children wanted me to play and sing these to them in school. At first I demurred a little because of the kind of music. Then I thought that if there was anything that I could do to make our boys and girls happier I ought to do it. Why shouldn't they have a chance to enter into the "community feeling" that we were trying to instill into their hearing brothers and sisters? The children knew what they wanted and I followed their lead. This music had a swing and an unmistakable accent which they felt and liked.

The fifth and sixth grades learned The Long Trail and Keep the Home Fires Burning. How proud they were of their attempts! The seventh grade and the advanced classes learned the old Southern folk songs, Carry Me Back to Old Virginny, Suwannee River, and The Old Kentucky Home. They called for Till We Meet Again, Joan of Arc, Pack Up Your Troubles In Your Old Kit Bag, Smiles, and the other songs that our soldier and sailor boys were singing. They bought books containing the words at the ten-cent stores. A girl in Grade VII surprised me one day when she brought into the room a number of type-written copies of several songs for a class of 10. She had typed them herself. The children are all willing to work hard in the daily-speech lesson. They know that if they finish their drill period the community sing or music with the little orchestra will follow.

When I first began voice training with the children, I chanted the different songs with them. Since then, and for a number of years, I have sung the songs. I made a practice of trying to make the pupil conscious of the singing voice. I did this with each child. In every case where there was latent hearing, I found that the child would react to a singing tone rather than to a spoken one.

It was suggested that the Victrola would be a means of stimulation. Some schools for the deaf were using that. It is a great aid in that it helps to awaken

dormant hearing, but it is not satisfactory as to testing because it is asking too much of a hard-of-hearing pupil to differentiate between words of a song which he has heard on the Victrola. There is nothing which can take the place of the human voice. Consequently, I rely upon that as my most effective stimulus. That is what the child will hear after he has been trained to listen. It is a great thing for the pupil to be able to hear his own voice. He is then able to modulate it, inflect, increase, and diminish its volume or force at will. He can be trained to do this intelligently.

In the beginning, the children are taught to recognize the long vowel sounds through the ear. Standing very near the child I start with the long vowel *ee* which is prolonged and sung on the octave above middle *d*. As soon as my pupil is conscious that he hears the sound and can tell what it is, I pass on to the vowels *ar* and *oo*. He is then taught to differentiate between those vowel sounds. When I first began working with my class, I had to literally sing into their ears, but I gradually increased the hearing distance, so that now I can stand 15 or 20 feet away from them and they can readily tell me the vowels sung. The hearing distance is much less for the spoken vowel—although my children can hear the spoken word if I stand 4 or 5 feet away, when in the beginning of the work, I had to speak with my mouth close to the ear. Of course, it is a harder test for the children to differentiate between the diphthongs, due to the fact that there are two elements in a diphthong, the initial sound and its glide.

From the singing of the simple vowels, a plan was developed by which the child would become acquainted with the songs which he would be apt to hear at home. At first I tried the Victrola and played records of familiar airs. The pupils were more or less indifferent to that approach. They liked the stimulation of the music, but they were unwilling to attempt differentiating words.

At first, because I firmly believed that a singing voice would carry better than the spoken word, I myself sang to them. Without exception, the class preferred the human element to the Victrola. Then I conceived the idea that I wanted them to take a more active part in the lesson. Accordingly, I asked them all to try to sing with me. They were able to keep the time and rhythm because we had done a great deal of such work in connection with our speech lessons. This volume of tone seems to stimulate the auditory mechanism to an increased degree.

When they had learned two songs, I began to help the children to distinguish between them. We have added to our list so that the children have a repertory of about 30 songs with which they are familiar and which they differentiate one from another. I can stand 15 feet away from the pupils and they will readily tell me which song is being sung.

In the early stages of my work it was necessary for me to sing the whole song through, but now a few measures suffice for a quick recognition and response on the part of the child. Please remember that the children are not being taught to sing, but that they are singing together for the sake of auditory stimulation which they are actively giving to themselves and to each other. All of this work is given for the reaction it will have upon their hearing thus making for better speech.

The children have been trained to listen so carefully that they can also recognize the songs when played on the piano.

Songs are chosen which stimulate different sound areas—low, medium, and high. As my own voice has a wide range it is not at all difficult. I also select them from a standpoint of rhythm. Some songs have a slow tempo; others have a very quick one. Such songs as "A life on the ocean wave" and "Jingle bells" make for flexibility of speech. The children have made great progress in tonality and in the ability to sing in time. The effect was very pleasing when they sang "Tenting to-night" and "Chopin's funeral march on Memorial Day." In the funeral march one part of the class gave a humming accompaniment while others sang the melody. This is a difficult thing for children with perfect hearing to accomplish.

The class is trained along natural lines. As soon as the child responds to singing tones and differentiates between them, and after he has recognized the various vowel sounds, when spoken, he is led on to distinguish between words. He is trained to listen to the sound of his own name and to respond to it.

From this point, he learns to listen to simple commands as, "Walk, run, hop, jump." Then actions are introduced "Open the door." "Get me a book." The context helps him to the right action. Of course, he is by this time, having regular drill in listening to consonant and vowel combinations. I use the simple vowels at first. Then a scale like the following is used: bee, bie, bay, ba, bar, baw, boe, boo. To this scale I prefix the vowels *o*, *ar*, *ee*, and *oo*.

The child responds to simple questions. Then I begin to tell a story into his ear. Of course I stand very near him at first, then gradually increase the distance. If a child does not get a word the first time, I let him look at me. Then I repeat the sentence, and we try again.

We work for inflexion and try to get the child accustomed to the rising and falling of voice in speech. After he has mastered these two inflexions, it is easy for him to combine them into a wave. We try to be very dramatic in this exercise.

It may interest you to know just what is done in a class lesson. When the children come for the auricular lesson they stand near the piano. They are interested and alert and ready to listen. Everyone is happy and is giving the best of attention. Every child turns away from the teacher while she plays certain chords on the piano. The class tell what part of the piano has been played—low, medium, or high. This is done to get the pupil accustomed to a sense of pitch. The teacher follows this with the singing of vowels on different degrees of the scale. Then I start to build up the tone quality, using our regular vocal exercises. I work for the placement of the voice. For the resonant quality, which I desire I use different humming exercises, besides the following one *hee-oo-ar-aw*. This is taken on every tone of the scale. For placing the tone forward, I use a vowel scale in combination with focusing consonants as *b, f, z, th*. We increase and diminish the volume of tone. Exercises for accent and rhythm are also given. After the voice building to which all the children are listening and in which they take part as individuals, I drill upon our familiar songs, thus making repeated concepts.

No lesson is complete without testing for spoken words, phrases or sentences.

A younger group of children is trained along similar lines. Instead of community songs, they are becoming familiar with Mother Goose melodies, action songs, and those which are used in the physical training period.

We use the Montessori bells. The children tell whether the bells are the same in pitch or not the same. They are trained to match the tones and to note the relation one bell bears to another whether high or low. Some of the pupils can build up the scale with the bells, but this is difficult and requires a keen sense of pitch.

What is the result of all this work? Does it carry over into the homes or manifest itself in other school work? We are constantly receiving reports from parents expressing appreciation of what the school is doing in this respect. The children themselves are happy over their new sensation, and very often tell me of some new sound they have heard. "I heard my mother's voice." "I heard my sister play the violin." "I can hear Fannie's voice." One boy heard another boy make some exclamation as he passed him on the stairs.

Two of the girls can sing the different songs almost on the same pitch with me, without the piano accompaniment.

One little girl, who, three years ago could not hear the loudest music when her ear was close to the Victrola, and who could not distinguish between the different vowel sounds, can now tell what I am singing when I stand a number of feet away from her. She can understand a story when I stand about a foot away from her. She can speak with expression, when before training her voice was dull and monotonous.

The younger class of children which is being trained to listen seem almost like a class of normal children. They enjoy every moment of the class lesson. They have even gone so far as to interpret little dances for the songs which they have learned.

We have had all the children scientifically tested by our otologist. We have a card catalogue to which we can refer and which contains the records. He has made tests at different periods so that we can know if, in his judgment, the hearing has improved.

We test for distance, volume, pitch, inflection, and for the vowel sung and spoken. We also make note of the child's progress in hearing conversational phrases and sentences.

I feel that a great deal has been accomplished in the last two or three years.

Unless interest is shown on the part of the child the lesson is dead and fails of its purpose. It has always been a surprise and delight to me to see how the children work in a speech lesson, even when it becomes a matter of "over and over again." In the lesson at the piano there is no urging of the children on the teacher's part to sustain either interest or attention, for both are found even at the start. The children know that they are in the class for a well-defined purpose. It is for the teacher to lead on with her aim clearly in mind and they will follow with results surprising to themselves and to her.

Every school for the deaf should have a trained teacher of the voice. A teacher of elocution is not enough unless she has had vocal training. The teacher must be able to send out good pure tones which she can sustain and which will carry. It is hard to find teachers who are willing to devote their musical ability to the training of the deaf.

In all this work optimism and enthusiasm must be our watchwords.

We must not allow the "low powers of hearing to go unutilized." We must try to increase the sound perception by all means of auricular training and education. This work with the voice and the development of the rhythmic sense is of great value. It will open up a world of beauty to the child of which he would otherwise be ignorant. Let us not deprive him of anything that may restore him a little nearer to the normal type of childhood. Let us try to open the "closed doors."

Miss COLEMAN: Are there any questions? Would anyone like to ask Miss Henderson any questions?

Mr. Haycock, would you like to make your announcement now?

Mr. G. SIBLEY HAYCOCK, of England. I want to bring to the attention of this convention the fact that at the executive meeting of our college in London, England, held last month, it was decided, subject to conditions being satisfactory, to hold an international conference in England in 1925. Now a resolution was passed by this convention yesterday making the meetings of the convention biennial instead of triennial as in the past. That will mean that the convention will meet in 1925, which is the year that we have fixed upon for our international convention. I wanted to get some idea before we disperse as to the feeling of the members of this convention in regard to their coming over in the event of our holding this international meeting in 1925. We might consider holding it in 1924, were conditions in England and France a little more satisfactory than they are, and more satisfactory than they will be for some time to come. We could not insure a successful convention by holding it in 1924.

The question is whether you would be prepared to postpone the effect of the resolution you passed yesterday and make your convention to meet in 1926, in order that members might come over to attend the international convention.

I put that in order to find out what the feeling of the convention is, both on the part of the general body and of those officials, the executive committee, who will determine the question as to whether the effect of that resolution changing the convention from a triennial to a biennial affair would be that you would have to hold it in 1925, or whether it might be held in 1926, and whether we might hold a joint convention.

I shall have to report on this matter when I get back, and I want to be able to say something definite, because on what I say to my executive committee will depend very largely what we do in the matter.

Doctor DOBYNS, of Arkansas. When do you fix the date of your convention?

Mr. HAYCOCK: It is not fixed; but probably toward the end of July or the middle of August. It is usually in July it is held.

Mr. BRILL, of New Jersey. Would you postpone yours until 1926? We might have a better meeting then.

Mr. HAYCOCK: It is possible we might.

Doctor DOBYNS: Mr. Chairman, I don't think it would interfere with our convention, because there would not be a large enough number of our people going over there to interfere by having them both the same year.

Doctor HALL. We usually, Mr. Haycock, have our meeting about this time. It might be possible for a number to join in your meeting also at a little later date. I think it would be very wise if you would communicate with the new executive committee, headed by Dr. N. H. Walker, the new president, and give him the time of your meeting, the report that you have briefly sketched to us, and ask his opinion on the matter. I believe that Doctor Dobyns' suggestion is a very good one, that it might be possible for a number to go over, just the same, to that meeting, or Mr. Brill's suggestion that we might possibly even have a better meeting over there in 1926. I do not believe we could send a very large representation to your meeting anyway, but I am sure that many would like to go.

Mr. HAYCOCK. Could I get any expression as to how many present think it likely that they would accept the invitation to an international meeting?

Doctor HALL. I will try to make the board of our institution send me, but I do not know whether I will succeed.

How many who are present here think they could go across to an international meeting? Will it be in London?

Mr. HAYCOCK. We have not decided upon that. Our last international conference in 1907 was held in Edinburgh.

Doctor HALL. How many here are sure they will go to an international meeting? Hold up your hands.

(A number of hands were raised.)

There are 2,000 teachers, you know, in this country, and there are only 150 in this room.

Mr. HAYCOCK. May I ask this question: Would those who put up their hands come to the international convention in 1925, supposing that the American convention is held at Council Bluffs the same year?

[Cries of "No, no."]

You would come only if there were no convention in either the States or Canada in that year, and that the international convention was the only one being held. Is that the understanding?

[Cries of "Yes, yes."]

Thank you very much.

Miss COLEMAN. The report on the use of radio in auricular work will be postponed for the present, as we wish to hear Mr. Forrester's paper, and see his demonstration on the results of auricular training. Mr. Forrester being near Belleville has been able to bring some of his pupils here.

Mr. FORRESTER. My paper will not be more than about two minutes in length.

RESULTS OF AURICULAR WORK.

By Supt. T. C. FORRESTER, Rochester School.

We believe it is generally conceded that everything possible should be done to develop residual hearing, to help the hard-of-hearing child to use and depend upon his hearing as much as possible, and, in cases of progressive deafness, to help retain it as long as possible.

With the first of the above objects mainly in view, auricular work, as such, was begun in the Rochester School for the Deaf seven years ago. The class selected was a large one in the intermediate department; and in the demonstration which is to follow this paper you will have an opportunity to judge the results of that training for yourselves.

As the classes were begun during Doctor Westervelt's superintendency, I have prepared the following from notes and articles written by Miss VanIngen who has had charge of the classes all these years. As the *Volta Review* for February, 1920, contained considerable detailed information in an article written by Miss VanIngen, I give just a very broad general outline of the plan which has been followed.

The first attempts were with acousticons, 12 in all, which were connected with the teacher's desk. A multiacousticon and three smaller ones were also used.

The minimum of hearing of the class was perception of sound. The average amount of hearing was enough to enable the pupil to distinguish two vowel sounds spoken in the ear without the instrument. These vowels might be a(r) oo, a(r) ee, oo ee, or other combination.

Fifteen minutes a day were devoted to this particular work when it was first started and each pupil was required to keep a record of every sound heard. This period was however increased to half an hour in some classes.

The teacher began with three vowels: a(r), oo, ee, spoken one at a time. At first the pupils were allowed to see the teacher's lips at times while they were listening to her voice through the acousticon, and then they had to depend on hearing alone. In the first attempts, it was aural plus visual but later aural only.

The next step was to give the sounds two at a time: a(r) ee, oo a(r), a(r) oo, etc. Following this we had diphthongs i, oi, ü; and then words: Are, we, you. Later came phrases: Are you, are we, we are, etc.

In the next stage consonants were added and simple sentences constructed: "I see you," "Do you see me?" etc.

Of course all this took months and months and called for great patience and perseverance on both the part of the teacher and the pupil.

Next followed syllable drills, ba ba, da da, ga ga, using voice consonants with all the long vowels.

Needless to say, the hearing of the children was not constant but somewhat variable and what they heard one day they would not necessarily hear the following day.

A monthly test was given to find out what each pupil could hear with and without the instrument and the same recorded.

The vowel exercises were varied by having pupils try to reproduce difference in tone and pitch through work at the piano and by having different pupils and sometimes a teacher speak to the class to see if they could distinguish the different voices.

From vowel sounds, syllable drills, and phrases we come to short sentences: "I see you," "I saw the boy," etc. These were worked over as follows: First only the vowel sounds were spoken i-ee-u. Then these were run together ieeu. And lastly the sentences was spoken "I see you," which was written in their notebooks when the teacher was assured they heard it.

This exercise was varied by having sentences written on the board and the vowel sounds under them. The pupils picked up their acousticons and closed their eyes while the teacher spoke first the vowels, then the sentences with the vowel sounds prolonged, and finally the sentences spoken naturally and rapidly.

Longer sentences were added from time to time; but all these were chosen with reference to the vowels and with regard to the suitability of the language for the class.

In one of the classes the speech reading was much below par and the pupils were allowed to wear the acousticons while the teacher in giving lip-reading exercises spoke in a loud voice, hoping they would get an occasional vowel or word. The teacher (Miss VanIngen) says this helped both hearing and lip reading considerably.

Later on the pupils were urged to listen at all times to all sorts of sounds without the aid of the instruments and to keep a record of the same. Teachers of geography, history, and physiology were asked for lists of questions and as the pupils heard these (without acousticons) they jotted them down in their notebooks.

Poems and rhymes were spoken in concert to train them to follow a leader without reading his lips, and the swing and rhythm of these were much enjoyed.

Then came dialogues or play to teach conversational inflection or expression. Some of the plays were the *Mother Goose Rhymes* in prose.

Later the syllables and sentences in Miss Bruhn's book were found most helpful, likewise the conversations in the *Nitchie* book, while good use was also made of *Little Stories Simply Told*.

Miss VanIngen reports that in a group of 53 children only 5 seemed to have no preception of sound. One of these persisted in using the acousticon every day for nearly a year before she got anything. She eventually heard vowel sounds and could distinguish and reproduce difference in pitch.

In every case when a pupil could take new words through the ear interest was stimulated and zest added to the work.

Before concluding perhaps it would be interesting to give a brief history of these particular pupils. These notes have been carefully kept by Miss VanIngen.

JULIA CARLSON.

Julia Carlson was 4 years old when she became deaf. She was 10 years old when she came to school. She began her regular acoustic work in 1917.

With the instrument at that time she heard a few words and two or three familiar sentences spoken a word at a time; without the instrument, about six words and two or three sentences.

In 1920 Julia heard, with the instrument, sentences that had never been drilled upon; without the instrument, she heard 6 inches from the ear words and sentences that had not been drilled upon; vowels as given in Miss Bruhn's book, Lesson I, and the combination of vowels and consonants of Lesson IX, and about half of the sentences under Figure 37 in Lesson IX. Could tell differences in voices, sing scale, and hear dates, as 1923, 1942, etc.

In 1923 she can almost follow a melody, hears all sorts of sounds about her and hears her name called. Of course, all this without the aid of any instrument. She sometimes hears sentences at a distance of 1 foot from the ear, sometimes 2 feet.

MARTHA WELLS.

Martha Wells was born deaf. She was 9 years old when she came to school. Had some oral work when she was in the kindergarten. She began regular aural work in 1917.

At that time, as far as I could discover, with the instrument she heard four or five vowel sounds. Without the instrument, she heard only voice.

With the instrument, in 1921 she heard words, sentences, and numbers and began to want to give up using the acousticon.

Without the instrument, at this time Martha could hear at a distance of 1 foot from the ear, but was not so sure of her hearing as others in her class.

Now, in 1923, she hears short stories, hears a little over the phone, lists of articles to be purchased, and music. Writing of hearing music she says, in 1923, "I enjoyed hearing the music very much. Indeed, it impressed me and filled me with joy." Once in the night her mother came to her bedside and asked her if she were warm enough. Right out of a sound sleep she answered, "Yes, thank you; I am warm enough." In 1923 she hears separate sentences at a distance of 1 foot, hears stories best if spoken distinctly about 6 inches from the ear.

METHA KINN.

Metha Kinn was 2 years old when she became deaf from a fall. She was 7 years old when she came to school. She began auricular work in 1917.

At that time with the acousticon she heard a few vowel sounds. Without the instrument, she heard only voice.

In 1920, with the instrument, she heard all the long vowels, some familiar words, and could detect and reproduce difference between high and low pitch.

Without the instrument, in 1920, at a distance of 6 inches from the ear she heard vowels, familiar words, and a few short sentences. Heard changes in tone and pitch much more easily than the others, but is not so sure of words, sentences, and numbers as the others.

In 1922 Metha decided that she did not like the acousticon. In 1923 hears better without the acousticon if sentences are spoken 6 inches from the ear.

SADIE GREEN.

Sadie Green was born deaf. She was 4 years old when she came to school. She began regular aural work in 1917.

With the acousticon at that time she heard some of the vowels and a few consonants and seemed to notice difference in pitch but could not reproduce it. Without the instrument she heard a few vowel sounds spoken 2 inches from the ear.

In 1920 Sadie was always on the alert to hear. Heard sentences spoken slowly and distinctly 3 inches from the ear. Heard numbers spoken 6 inches from the ear.

Now, in 1923, she said one day, "I love to hear you laugh. You go up and up and up," which shows she is noticing voices. She said, "Sometimes when it is too dark to read the lips, my sister speaks in my ear and I hear her very well." Sadie hears short stories and remembers the language of them. She enjoys music and has heard two or three sentences over the phone. One day a teacher in an adjoining room dropped a pointer and Sadie said, "What was that? O, I know, a pointer fell."

In 1923 she hears at a distance of 1 foot, but sentences often have to be repeated.

Regarding the use of an instrument, we might say that we are not so enthusiastic over its use as we were at first. We believe it has a place, though a limited one; and while for our purpose it is necessary in the initial stages in many cases, we believe words spoken in the ear with the natural voice as soon as possible helps to produce better and more natural speech so far as expression and inflection are concerned. And further, we believe that the hearing of every child should be tested, and where there is a possibility of development training should be undertaken and that from the earliest years.

(Miss Van Ingen and four girl pupils came on the stage.)

Mr. FORRESTER. Miss Van Ingen is going to read a story to Martha Wells, and then Martha will write out the story on the blackboard. Perhaps it would be better for you to read the story, and you can see how near the pupil comes to writing it, or read the story after she has written it, and then you can tell how near she has come to getting the whole thing.

Mr. HAYCOCK. When did she first come to the school?

Mr. FORRESTER. In 1917. She was born deaf. She was 9 years old when she came to school.

(Miss Van Ingen read a story to Martha Wells, who then wrote it on the blackboard.)

Doctor CROUTER, of the Pennsylvania institution. How often have they been over this story?

Miss VAN INGEN. I have never spoken the story to her before. Some time ago, two or three years ago, we had some of these stories for lip reading, but I have never spoken that one to her before.

Doctor CROUTER. She is writing it entirely from the recital you have just given her?

Miss VAN INGEN. Yes; unless she remembers it from her lip reading. We have had these stories by well-known people for lip reading.

Doctor CROUTER. The same is true of the story that young lady is writing?

Miss VAN INGEN. She never had that story before.

Mr. FORRESTER. I would be very glad if any of the people here would select another story, any story in the book, just to make doubly sure—any simple story—and have it reproduced. Of course, I don't want to monopolize the whole afternoon, but perhaps to-morrow morning or after the session this evening we might have some further stories.

(Miss Van Ingen continued to read stories and speak sentences to the pupils.)

Miss COLEMAN. We have the pleasure of having with us this afternoon Miss Croghan, who has charge of partially deaf children in London, England. She is going to tell us about their school.

A SCHOOL FOR PARTIALLY DEAF CHILDREN.

By Miss AMY M. CROGHAN, London, England.

Ladies and gentlemen, I have been asked by the auricular section of this convention to give you some account of my experiences in a school for children who are partially deaf.

It is an honor and a pleasure to comply, and I only hope I may be able to interest you in the problem of the partially deaf child.

At the last international conference held in Edinburgh, in 1907, the resolution, "That in order to make suitable provision for those partially deaf children who could be better taught in a hearing environment and by methods adapted to hearing children; special classes should be provided under the management of teachers qualified to teach speech to the deaf," was fully discussed by the leading teachers of the deaf and was unanimously passed.

The outcome of this was that in 1909 a class for partially deaf children was formed in London (one had previously been opened in Glasgow by Dr. Kerr Love, but I am now dealing with England).

The only available place to form the class in London at that time was in a school for the deaf.

Measures were taken to prevent the mingling of the partially deaf with the congenital deaf out of school hours by arranging for the former to come and leave a quarter of an hour earlier than the others; but these precautions did not prevent the children from waiting for and fraternizing with each other outside school.

In 1913 a school for entirely partially deaf children was opened in the southeast of London by the London County Council; I was put in charge. It was the first of this type; and I may say, in the opinion of those who have been interested, the results have been definitely encouraging.

There are now three similar schools in London, one in Bristol, and others are being discussed.

The case of the partially deaf child is rather complicated and not easy of solution—he has too much language for a deaf school, and in his own interests he should never be inside one.

Yet, in the normal school, he is found to be a difficulty and the teacher there is often and quite naturally only too pleased to get rid of him.

The limited range of language in use in a school for the deaf, catering for the congenital deaf pupils, is not wide enough or difficult enough to demand much effort on the part of the hard-of-hearing child. He has frequently already acquired sufficient facility in speech to suffice for his every-day needs, and in a school for deaf children, instead of improving in vocabulary and power of expression, he is content with the limited range of expression of the congenital deaf child, and frequently there is a tendency to deteriorate.

The partially deaf child, when once he has mastered the phonetic values of sounds in English and lip reading, has nothing more in common with the congenital deaf, and should proceed at a quicker rate than the average deaf pupil. We must expect much more of him in the way of speech and language than from those whose ears give no assistance.

Follow his career briefly in a normal school.

Here it is found that a large proportion of partially deaf children are decidedly backward in intellectual development, not from any general mental deficiency but from their mental powers remaining undeveloped, owing to their physical deficiency. These children when placed in a large class are a drag upon it.

The teacher in the ordinary elementary school has 40-60 normal alert children to deal with. The lessons, conducted largely orally, have to meet the needs of this large group, and in dealing with them the teacher can not possibly cater for individuals without loss to the whole.

The teacher has not the time to give the special attention which the partially deaf children require, and so they get left behind. They become indifferent and listless, and frequently grow very dull and stupid through compulsory inattention and from inability to follow their teacher.

They are slow in hearing and slow in replying. Their education is impeded and a vast amount of educational waste ensues. They drag out a useless and colorless existence in the back rows of these large classes.

They are too deaf to pick up much information from their teachers, who not fully realizing their handicap look upon them as a nuisance and breathe a sigh of relief when they are moved on to the next class, where they go through a similar experience.

They very seldom pass beyond the middle of the school, and later on reach the age limit, and finally leave.

They have been left to struggle along as best they could, in unequal competition with their classmates, falling behind more and more, until they become a burden to their teachers, and school is a distasteful and inscrutable problem to them.

They have been deprived of the education rightfully theirs, because there has been no one to give them the needed assistance at the right time.

When the schools have finished with them, they are only, however, on life's threshold, and must now take up their work, with the handicap of deafness, with scant education, and the likelihood of losing much they are supposed to have learned.

The partially deaf child's place is not in the elementary school, or in the school for the deaf. Where, then, is he to go? Special educative means are necessary to arouse some degree of activity to prevent lowered mentality, and to evoke the stimulus of interest which comes only with power to cope with the problems set before us.

The schools that have been opened in London have now got beyond the experimental stage.

They have supplied the much needed remedy for this particular type of child.

In order to tell you what I am doing, I must to some extent be personal, which please pardon.

The school with which I am connected started with two classes, with 15 children in each class, but there are now three classes. Although not large, it is the largest of its kind at present in England.

The school consists of a separate building within the precincts of the normal school boundaries; that is, it is situated at one end of their playground. The organization of the normal school is utilized as fully as possible to assist our ends—for instance, my children are sent there for some of their lessons, such as drill, drawing, singing, reading, and later to dictation and composition.

Even if the child is not doing much in a hearing school at first, he is mixing with the normal, and this tends to make him less special.

He, too, is unconsciously developing his hearing powers.

In singing with a class there is tone, pitch, and rhythm, and if the partially deaf can not join in to the full extent, he is listening and strengthening his residual hearing.

I only allow them to be in the normal school for brief periods, about an hour a day or even less at first.

Upon admission I test the deafness and find these children come, roughly speaking, between the slightly deaf, who can be educated in the front desks of the normal school, and the very deaf, who require the special education of the school for the deaf.

The term "partially" deaf is vague, and I have tried to establish some limiting classification.

To test the amount of hearing which a deaf child has is most difficult. I try to test the deafness upon admission, but leave the final testing for a week or two, until the child has become accustomed to his new surroundings.

The degree of deafness varies considerably from time to time.

Whilst some are to a limited degree subnormal constantly, others vary greatly from day to day. One day a child will respond to the test, but upon repeating the test a few days later he fails. I found this so interesting that I keep charts showing the amount of each child's hearing power.

When testing, I also note the state of the weather on the chart in order to make a record later on as to how much the weather determines these varying degrees of deafness.

For the test I stand at the back of the child, about 20 feet away, with the floor marked every 6 inches, gradually walking toward the child repeating simple sentences, disconnected numbers, and words in a forced whisper and a low voice, alternately:

(Whisper) What time is it? (Low voice) What time is it?

(Whisper) Mother. (Low voice) Mother.

(Whisper) Arthur. (Low voice) Arthur.

(Whisper) 14, 22. (Low voice) 14, 22.

It is difficult to fix the amount of hearing which should qualify for admission to a school for the partially deaf. In a child with normal mentality, a comparatively small amount of hearing is sufficient to enable him to be instructed in a hard-of-hearing school, and a dull child with a greater degree of hearing is also qualified for admission. His dullness may be due to impaired hearing.

I have found a bright, quick child with a hearing range of only 6 inches for the ordinary voice doing as well, or even better, than the dull child who could hear at 16 feet.

Dr. Kerr Love has a scale in his book on *The Deaf Child*, and on this I have based my chart.

He says the only practical test of any value is the human voice, and the most uniform method of applying it is by whispered speech. Watches and tuning forks are of scientific value, but the school child's progress depends on being able to follow the voice of the teacher, hence speech is the test the teacher should apply.

On his chart Dr. Kerr Love has yards. I fix mine in feet on account of the disturbing effect of the noise of the London traffic and of the proximity of my school to a busy railway station.

A child who responds at a distance of 5 yards is not likely to be backward on account of deafness and could be taught on the front row of the normal school.

Any further diminution of this hearing power strains the attention of the child and makes it advisable to put him in the smaller classes for the partially deaf.

The causes of deafness vary, middle ear trouble, adenoids, suppuration, catarrh being the chief. Many of the children in attendance have suppurating ears. A new treatment, "zinc ionisation," is now being adopted with a view to the complete drying of running ears. My school has not yet started this treatment, but it is to do so probably next term.

At present a nurse under the supervision of Doctor Yearsley, the London County council otologist, comes to the school daily and attends to such children.

Before being passed for the partially deaf school, the children are reported on by the doctor in the normal school. They are then sent to the head office at the London County Council medical department and examined by Doctor Yearsley and Mr. B. F. Jones, the superintendent and inspector of schools for the deaf. Dr. Macleod Yearsley visits the school periodically, and my observations on the children are submitted to him. Any exceptional cases are brought to his notice and are specially tested.

After a course of training in the phonetic value of sounds, and lipreading, a certain number of children hear better.

They have enough residual hearing to respond satisfactorily to auricular education, and these appear to develop actual power of sound perception.

But any considerable increase in actual hearing power is unlikely, if surgical and medical efforts have been unavailing.

The pupil seems to hear better, but careful examination will show that this is due to an increased ability to interpret sounds, which hitherto were without meaning to him; and an accompanying increase of attention to them; which is a natural consequence of greater comprehension of their meaning, and not to any important improvement in actual hearing. As soon as the child has grasped the value of phonetic sounds, he frequently says he hears better, and he does.

The amount of hearing power he had has been educated.

My aim is to measure the child's hearing and use it to its utmost. These children are auditives, and not visuals like the congenital deaf; their ear is of practical use to them.

I have gone rather fully into the hearing powers, as so much depends upon using and developing them to their fullest capacity.

After a course of lipreading and ear training, 20 per cent have been transferred to their own school again.

I inquire about the children from time to time, and their reports have been favorable. I have asked the teachers in the normal schools to send them to me again if progress is slow, as it may mean that the effect of partial deafness is aggravated by the extraneous noises of the larger classes.

It is characteristic of middle-ear deafness that the power of accommodating the ear to particular sounds is impaired; and that in consequence extraneous noises confuse the slightly deaf, and hard of hearing much more than the normal child.

In every class, but especially in large ones, there is more or less a continuous environment of outside sounds such as shuffling of the feet, coughing, dropping of books, etc. After the hard-of-hearing child has been in the smaller classes such sounds in the larger ones must at first handicap him.

I explain this to the normal teacher, when the child is transferred, and this usually arouses interest in the child's progress.

This percentage of returns will, I hope, in the future be higher. In the early years the children were admitted at too late an age to be benefited much. They

were discovered in the normal school at periods when they had spent nine-tenths of their school life there, and were sent to me at the ages of 12, 13, and 14.

Now I am admitting them at an earlier age, and the future is much more hopeful.

In our school for the partially deaf, we open with a hymn. It is a crude attempt in some cases, but I find that the tone of the voice improves with practice, and the children love singing. It has also a good effect on ear training.

The mental attainments of the children upon admission are not high. Deafness has retarded progress.

Lip reading practice is given. The children enjoy this. It is something new to them, and they take keen interest in it.

I find spelling and reading very weak. The teaching of phonetic sounds improves their speech and reading. They have, too, found an outlet for their latent talent. Instead of feeling they are a nuisance in a class, and unable to cope with the work in hand, they find that here is something they can do, and they readily rise to the occasion. When once they have mastered the phonetic values, they become much more alert, and remark that their hearing is better.

(We have had the same remarks when teaching the partially deaf adult. I frequently heard it, too, when giving lessons in lip reading to the deafened soldiers.)

Owing to the long-continued inattention for reasons I have already explained before coming to the school, the children can not concentrate for any length of time. Ten-minute lessons only in lip reading are given at first. Following this, I give an aural lesson, standing at the back of the class, using raised voice, or getting the pupils to close their eyes. This rests the eye which at first may feel some strain.

These lessons demand a tremendous amount of control and few at first are able to respond. The aural lessons are very useful to the teacher, if uncertain as to the amount of hearing the pupil has, and the pupil realizes which ear is the more useful to him, as he always turns the better ear towards the sound of the voice of the speaker; it also makes the pupil realize his mistake in saying he can now hear.

The standard of lip reading is higher than that of a deaf child, probably on account of the greater range of natural language a partially deaf child has, and his consequent ability to gather the ideas from the context. I find those with more hearing seem to learn lip reading more rapidly. This may be, the greater the hearing, the greater the language; so that the child grasps the language more quickly from the lips, than one who is more deaf and has less language.

I have devoted my remarks chiefly to the hearing power and lip reading of the pupils, which are the essential features of our work.

Other lessons are taken as in a normal school. The senior boys attend a woodwork center, and the girls cookery and laundry with normal teachers. The teachers report well, and have little difficulty in proceeding on normal lines.

The transport of the children is all arranged; they come by tram, bus, and train from the whole of the southeastern part of London, their fares being paid by the London County Council. In most cases the distance is too great for them to get home to dinner, so a good dinner is provided for them at school at the nominal charge of 8 cents per head.

If the parents can not pay this, the dinner is supplied free. The doctor and nurse attend regularly to see to their ordinary welfare, and the specialists attend periodically to inspect eyes and ears.

The majority of the children are drawn from the crowded areas of London, and are poor.

From the results of nearly 10 years' work in a school for the partially deaf, we make bold to claim that such schools have very fully justified their establishment; and that they have materially contributed to general education efficiency—

1. By relieving the ordinary school of a troublesome and disturbing element.
2. By relieving the schools for the deaf of a section unsuited to them.
3. By extending the usefulness and ability of a section of the community otherwise liable to be ineffective and a permanent cost, and by developing the general efficiency, definitely lessening the handicap—and thereby increasing the individual and group happiness—of this special class of the community for whom it is my privilege to work.

Doctor DOBYSN, of Arkansas, I want to ask Miss Croghan one question.

Do any of your pupils at any time use signs or the manual alphabet?

Miss CROGHAN. No, sir; it is not necessary. They have enough hearing so that it is not necessary.

Miss COLEMAN. We have a few minutes left for reports on the use of radio.

Mr. WILLIAM A. CALDWELL, of California. I see by the program that I am listed to read a paper on radio, but there has been a mistake somewhere. On the original program, as I read it, the paper was to be read by Miss Osborn, of Cincinnati, and I was listed as one of those who were to discuss it. There will be no paper, as I haven't prepared any, but I should like to say a word or so about radio. First, however, I should like to tell a little story.

There was a man going along the streets of a strange city looking for a certain building. He saw a man who looked as if he might be a citizen of the city and said to him, "My friend, can you tell me where the Second Presbyterian Church is?" The man replied, "Well, partner, you have certainly got me; why, I don't even know where the First Presbyterian Church is." [Laughter.]

That represents the status of my information on radio. I don't know the first thing about it. There was an article which you may have seen—apparently it has been all over the world—claiming that the California institution is doing wonderful work with radio. It was a most preposterous article, full of inaccuracies from beginning to end. It was all based on a few experiments the boys made. They conducted them independently. They were not made in the school-room at all. I don't know that the machine they constructed ever worked, but a reporter heard about it and came out and made some experiments himself. I was not at home at the time, and Mr. McCullough, the business manager, took him over to the supervisor's office, where this apparatus was, and he (the reporter) went away and spread the news, the glad news, to the world that we were doing great things with radio in developing the hearing of the deaf.

The article was so preposterous that it seems to me it should not have misled anyone, especially teachers of the deaf, but there were actually letters came from persons in our work asking about this matter. Two heads of institutions, I think, were among the ones who wrote. We had letters from all over the United States, from Europe, and even from Australia; for a time it seemed as if every person that came to the school came there for the purpose of seeing our work with radio. I became very tired of it, I assure you, and I want to take advantage of this opportunity to disclaim all responsibility for the circulation of this remarkable story.

Miss COLEMAN. Miss Osborn a few days ago asked me to express her regrets at not being able to attend the convention.

Mr. Goodwin, will you please tell us what you have on radio?

Mr. E. McK. GOODWIN. I don't know how much brother Caldwell knows about radio, the workings of radio: but if he knows any less than I do, he knows precious little. It got into our school paper that we had a radio outfit, and the first thing I knew I was asked to tell what I knew about radio, and I can tell you in about nine seconds; I know nothing about it. I know that it is worth nothing in the education of the deaf so far as we have been able to find out.

We have a quite good radio instrument. When my board gave me permission to buy it—or rather, instructed me to buy it—I said, "Now, don't be misled. This is not being bought for the deaf but

only for the pleasure of the teachers and officers and attachés in the school."

We have tried it with a number of the deaf pupils in the school, the most intelligent and those who have some hearing, and it amounted to nothing, and I think it amounted to very little for the pleasure of the teachers and officers of the school. We had it two months and we had an expert radio operator, a young man who was a radio operator in the Navy during the war, and with all that knowledge of handling the machine, our teachers and officers became rather tired of it and it was not used more than once or twice a week the last two or three weeks we had it.

Miss COLEMAN. Mr. Forrester, have you anything to say?

Mr. T. C. FORRESTER, of the Rochester school. We hoped that Rochester could have had a large radio installed before the close of the session and could have made a number of tests that would have been of some value to this convention, but I am sorry to say that owing to the shortage of time we were not able to make those tests.

One of the boys made a little radio himself, one of the boys who was totally deaf—thought to be totally deaf, but we found he had made a radio with which he could hear. After he had it in working order he could tell the difference between a violin and a piano and a singing voice. We were not aware that he could hear at all before he had this instrument installed himself.

We are going to have a large one. Of course the Eastman School of Music is situated in Rochester, and every afternoon and almost every evening they broadcast concerts, and we are hoping to have a radio installed more for the benefit of the hard-of-hearing pupils. We thought they would get a good deal of pleasure out of it, especially those that have just come to school and who have not become acclimated. We thought a little diversion for them would make them feel more at home.

There is, however, something I found in a paper the other day which I thought would be interesting to the convention, and as it will take only two or three minutes to read, I am going to take the liberty of reading it. There are a number of tests that have been made by A. J. Story; you have all read his articles; I think he is one of the most scientific educators of the deaf that we have. Mr. Story says:

My son has a very good four-valve receiving set and recently with my colleagues, Messrs. Goodwin and Folwell, I conducted experiments with a number of each of the main types of deaf children (a) those who had never heard, (b) those known as semimutes who are now completely deaf after having acquired speech naturally, and (c) those with present remnants of hearing. Only older and very intelligent children who could describe their experiences, if any, were selected. Both the voice and music were given to each child. In the first class, the totally deaf born, the results of repeated trials were nil. Careful observations did not detect any reflex indication of any sound perceptions, harsh or otherwise.

In the second class, the semimutes, the effects were as completely absent as in the first class.

In the third class three children known to have very slight vowel hearing, syllabic hearing, and word hearing, respectively, all shouted close to the ear, were tested. Response came only from the latter, and this not to any marked extent.

The absence of any practical value from wireless in curing or relieving deafness as such was evident, and we came to the conclusion that even in cases of partial hearing there were no possibilities in wireless that were not already better available from the plain human voice, assisted perhaps by the simple double ear tube.

Miss COLEMAN. Mr. Jones, did you have something to say?

Mr. JONES, of Ohio. Last February I attended a sale of Jersey cattle in the neighborhood close to Columbus, and after looking over a lot of fine cows in the barn I thought I would take a look at the calves. The calf shed was back a distance among some trees. Away from the crowd I saw an elderly gentleman, evidently a farmer. I walked up to him and said, "Let's go and see the calves." He said, "I wouldn't mind having a little nip." I said, "Do you think I am a bootlegger?" and he said, "I thought you might have a bottle." I said, "No; I was just asking you to go and see the calves." He wheeled toward the crowd and said, "Dom the calves."

Now, we have just had a little nip into radio. A representative of 300 newspapers came to see if we would furnish a class of pupils to be tested. He had read the California and the Cincinnati articles, and perhaps some others. I told him if he would send out a story after I had approved it I would be glad to cooperate. We took eight pupils, representing all the phases of our school, children old enough to interpret the sensations. Two or three we thought were totally deaf, but they got the vibrations from the radio and seemed to want to linger there and enjoy it. Some that had partial hearing, estimated at 25 to 30 per cent, could tell the kind of instruments that were being played and could recognize the human voice. One girl that we thought had 10 per cent of hearing could hear the sounds but she could not interpret them.

Two boys could get nothing. One of them had a sister who was in the party, supposed to be totally deaf. She enjoyed the radio and hung onto it and wanted more of it. She could not tell what kind of noise she was hearing, but she said it was different from the piano. She had had a great deal of piano work, while her brother had not had any training with the piano and had not had any rhythm work.

From the whole experiment I concluded that the radio was equal at least to the piano, with this advantage: If one enjoyed the radio, no second person was necessary. The person could sit with the instrument at his ears as long as he wished and not be imposing upon anybody to play. The music was already going on; but the piano requires an extra person.

One of the employees of the school, partially deaf, put in his own radio. I visited his room and found him sitting listening. He takes great pleasure in it, and a number of people go into his room and listen in.

I tried to make a correct report in the Ohio Chronicle, and anyone interested in knowing officially our conclusions should hunt up the issue of the Ohio Chronicle of that time.

I don't think this is a matter we can just throw away and say it has no educational value. It has an educational value ranking with the piano.

When our ship comes in, or when we come into money, we hope to put in a radio in a convenient place for the children to help themselves.

Mr. GOODWIN. I would like to sell you one. I wonder if each individual that enjoyed hearing and lingered to hear this instrument, the radio, didn't enjoy it about as a deaf man goes into our

carpenter shop and enjoys there the sounds that he hears. The machines run fast, the vibrations are very fast, and frequently a man goes into the carpenter shop to enjoy the vibrations. I wonder if that isn't the same way with these people that like to listen to the radio.

Mr. JONES. Well, I know they enjoyed very much what they heard over it, and we are going to have one as soon as we can.

Doctor LA CROSSE. Doctor Goodwin, may I just say this: The best physicists in the country tell me that it is the consensus of opinion that there is no special virtue in the radio that will help the deaf to hear, other than the principle of the amplification of sound. It is quite possible that what Mr. Jones says is true; that he has had some one sing close to the pupil's ear—I suppose you have done that?

Mr. JONES. Yes.

Doctor LA CROSSE. He has had some one sing close to his ear, and the pupil enjoys that, but no one will come and sing close to his ear for any length of time, and the radio takes the place of that, and Mr. Jones has the point exactly. Now, physicists say the same result may be achieved by having an amplifying set made. It is not necessary to have the sound sent from a distance, but if you want to have an operator or some one to sing you can make an amplifying set right on the place, but as Mr. Jones says, with the radio you don't have to have an operator; they can go there and get that practice without any further expense.

Mr. X. We used an amplifying set in our school from a Victrola, with a horn, and the pupils enjoyed it very much.

Doctor LA CROSSE. That is simply an amplifying set without the radio. We have had letters from people all over the country inquiring about the radio. They think there is something about the sound waves or some other waves that is going to restore hearing, but that is not the case; there is no special virtue in the radio to restore hearing.

Mr. TRAVIS, of Indiana. The Indiana school had an experience somewhat similar to that which Mr. Jones has just related and with results about the same, and I was of the opinion that there was something in the radio waves that makes them hear and makes them get pleasure out of these things. We tested them out just about as they did in the Ohio school. Then I went back into the back numbers of the Silent Hoosier for I don't know how many years—a long time ago—and I read about a column there, just about a column, and if they had just taken the radio tests and reprinted it in the paper it would have sounded exactly like them, the tests with the old-fashioned phonograph when we had an ear-piece in each ear, and did precisely the same thing that they do in the radio tests that Mr. Jones carried on. If I had just said "radio" and left off the fact that it was a phonograph it would have read exactly like the results that your school and our school and other schools got with the radio, so I don't think there is anything in the radio proposition at all.

Mr. JONES. I don't think there are any vibrations that amount to anything from a Victrola or phonograph, but there are great vibrations with the radio. You can't feel the vibrations from a Victrola. If you put your hand on a Victrola you can't feel the vibrations at all, but you can feel them on the radio.

Mr. TRAVIS. Oh, yes; you can. We had a blind and deaf boy in the school, and the only pleasure he had was standing with his hands on the Victrola, feeling the vibrations.

Mr. JONES. But there is nothing there to feel.

Mr. TRAVIS. There are vibrations.

Mr. JONES. I can't get them.

Mr. TRAVIS. He got them, dead sure, or he wouldn't have had any pleasure with it.

Mr. ARCHER, of the Illinois school. Mr. Chairman, the Illinois school has been conducting some experiments with a combination of the radio and the telephone. I can't go into scientific details about it, but we tested it out with some of our pupils that had the most hearing just before the close of school, and they certainly got a great deal of pleasure out of it. Whether it will ever be developed to such a point as to be of practical value in instruction I don't know, but it did furnish lots of pleasure to those half dozen pupils who tried it out. It was a combination of the radio and the telephone.

Miss COLEMAN. We will have to conclude our discussion, interesting though it is. That concludes our program for the aural section.

Doctor HALL. Please remember before we leave that to-night there is a lecture at 8 o'clock by Mr. Banerji on the instruction of the deaf in India. Also please remember that to-morrow morning our program starts at 8 o'clock, so that we shall be able to finish in time for people to take in everything on the program and make trains that leave shortly before noon.

(Whereupon, at 5 o'clock p. m., the convention adjourned until 8 o'clock p. m. this day.)

FRIDAY NIGHT SESSION.

The convention reassembled at 8 o'clock p. m., Dr. Percival Hall presiding.

Doctor HALL. Ladies and gentlemen, almost a generation ago, as we count generations, there came across the ocean from India a student to this country, Gamini Nath Banerji, who studied at Gallaudet College, in the normal class, prepared himself to teach the deaf, visited a good many schools in this country, and appeared at one of the professional meetings that was held while he was here. He returned to India and took charge of the school for the deaf in Calcutta.

It is sad to recount now that this brilliant man has recently died, but we have his son with us, who is repeating the journey of his father, retracing his footsteps, Sailendra Nath Banerji, who has come to us from the University of Calcutta, joined our normal class last fall and has recently graduated with the degree of master of arts from Gallaudet College. He has been preparing himself to follow in his father's footsteps, especially to go back to India and take his place in the school which his father for a number of years had under his charge.

It is a pleasure to invite to the platform Mr. Banerji, who will speak to you on the education of the deaf in India.

Mr. BANERJI. Mr. President, ladies and gentlemen, the Battle of Waterloo has been fought and decided. It now remains for Napoleon to go to St. Helena.

EDUCATION OF THE DEAF IN INDIA.

By SAILENDRA NATH BANERJI, Calcutta, India.

The history of the education of the deaf in India is comparatively a very short one. The first institution for the deaf was started in Bombay in 1885 by the Right Rev. Dr. Leo Meurin, the then bishop of Bombay. But for the obvious reason that the language taught is English, the school could not exert sufficient influence over the people.

The Calcutta Deaf and Dumb School, which I have the honor to serve, was the second school started in India. It was founded in May, 1893, by my father. It is now the premier institution of its kind in India. The total number of pupils on the roll is about 100. The school was started with two boys only, in a dingy and musty room, kindly lent by the authorities of the City College of Calcutta. Now it is well established and owns property approximately valued at \$150,000.

The period of instruction covers a period of 10 to 12 years. The pure oral method is employed for instruction. In fact, instruction in all the institutions in India are conducted orally. We send up our graduates for open competitive lower and upper primary examinations. The languages taught are Bengali and Hindi. In the higher classes, we teach something of English, too.

In the industrial shop, we teach our pupils free-hand drawing, painting, clay modeling, woodwork, tailoring, and printing. We have recently introduced agriculture, and expect to introduce weaving in the near future. After their graduation we secure apprenticeships for our graduates in outside workshops.

We sent several of our graduates for training in mechanical, electrical, and motor engineering. All of them are doing very well, and are now holding responsible jobs with big concerns.

We have a normal class in our school for the training of teachers. Our school can be very well called the alma mater of almost all the teachers of the deaf in India. Teachers graduating from our normal class have started several schools in the different parts of India. The course is based on the Northampton course.

There are only 10 girls on the roll. All of them are day scholars. For the last few years we have been receiving petition after petition from the parents of deaf girls living outside the city to make special boarding arrangements for girls. As yet we have not been able to secure sufficient funds to undertake such a task. But we expect to open in the near future a special boarding house for our girl scholars, so that they, too, may have the same opportunities to receive instruction in our school.

The school receives for its maintenance a monthly Government grant of 600 rupees (about \$200) and a monthly municipal corporation grant of 300 rupees (about \$100). These two grants do not cover even the establishment charges. Every year we run into heavy deficits, which are made up by public subscriptions and donations. Many a district board has founded a scholarship or two tenable in our school, which covers the boarding charges of the recipients of such scholarships. We make special concessions in tuition fees for those who are really needy. Almost half of our pupils are given free instruction.

It may be interesting to you to know how my father, who can be very well called the Thomas Hopkins Gallaudet of India, became interested in the work. To understand what an uphill work he had to accomplish, I shall have to take you back to the days of his boyhood.

Our family has always been a family of teachers. My great-grandfather was a well-known Sanskrit scholar. My grandfather was the founder of a Middle English school, the second oldest school in our home subdivision. In the latter part of his life, my grandfather was reduced to extreme poverty and my father had to struggle hard to receive an education. He often used to speak of those eventful days to us with extreme feeling. Tears used to run down his cheeks when he spoke of his mother. It was almost an everyday occurrence that neither he nor his mother could get even one full meal. Pecuniary affairs of the family gradually became so very serious that my father had to leave his college and go down to Calcutta to look for a job.

In Calcutta his life-long friend and colleague, Mr. Mohini Mohon Majumder, introduced him to the late Mr. Girindra Nath Bhose. Mr. Bhose was the unfortunate father of four deaf children, whom Mr. Majumder was then teaching drawing. Mr. Bhose was searching for a teacher to teach his children to talk, read, and write. Although absolutely ignorant of any method of teaching the deaf, my father took up the work out of pure sympathy and curiosity. Mr. Bhose gave him a copy of Arnold's "Education of the deaf." The subject was so new that the practical portion of the book remained unintelligible to him, but

by his natural perseverance and devotion he developed a method of his own and the result was very encouraging.

In the meantime my father and his coworker, the late Mr. Srinath Sinha, were planning to open a regular class for the deaf. They approached the authorities of the city college, who very kindly lent them a small room in the college buildings. The first regular class was started with two boys in May, 1893. Mr. Majumder came in soon after. Here the foundation of the present Calcutta school was first laid.

As I have already told you, there was then a missionary school in Bombay. My father was sent there by his patron, Mr. Bhose. He spent about four months there and came back with a determination to go to England. This idea appeared ridiculous to his friends, for neither he nor his infant school had any money. He, however, placed the matter before the executive committee of the school, who approved of it. By door-to-door begging he raised some money toward covering his passage to England. All along through his troubles and toils he was helped by Providence. Time was flying by, but he was short by 1,000 rupees. He approached the late Maharaja, Sir Jotindra Mohon Tagore, a kinsman of the world-famous philosopher-poet, Sir Rabindra Nath Tagore. The Maharaja intended to give him 100 rupees only. But in drawing up the check he placed a zero more to the right-hand side of the figure and said, "Well, I wanted to give you 100 rupees, but have drawn a check for 1,000 rupees." My father said, "Maharaja, please do not cancel that check. I am short just by a thousand rupees." He then sailed for London on the 11th of September, 1894.

In London he joined the training college for the teachers of the deaf at Fitzroy Square. Through the kind help of the late Mr. William Van Praagh, the director of the college, he secured a free studentship.

While he was in London, he heard much about the American schools, and decided to take a course at Gallaudet College. The fourth congress of the British Deaf and Dumb Association was held in Dublin in 1895, where he was present. He took advantage of the situation, and spoke to some of his friends about his intention to come to America. Through their help he secured a passage to New York, and got himself admitted into Gallaudet College.

A time will come, when the history of the education of the deaf in India will be written by able pens. In that book the names of Gallaudet College and of the Clarke School will loom large. The name of Doctor Gallaudet will be always revered by the deaf of my country. He took such a great interest in my father and his work. After a lapse of 25 years, I have come to your land to qualify myself to follow in the footsteps of my father. I can not speak too much of the great kindness I have all through received from Doctor Hall and the other members of the faculty of the college. It was principally due to his kind help that I was able to come to America. I do not know how to express my gratitude to him. But I can assure him that I shall always remember the buff and blue colors, and shall try to live up to its world-wide reputation.

Along with the name of Gallaudet College we shall always love and revere the name of the Clarke School. I am only a child in the profession and do not profess to have the audacity to discuss the time-worn controversy about the different methods. I only want to say how the great personality of Doctor Yale and her magnificent work influenced and shaped my father's ideals. We do not even dream of touching the high-water mark of perfection reached by the Clarke School, but we can stretch out our hands and try our best to go as near as possible to its standard.

In India we have about 200,000 deaf persons. Of this number, 68,734—35,404 boys and 33,330 girls—are of school-going age. For their instruction we have 14 schools only with a roll of 1,363 pupils. It is a pitiable condition. Without appropriate Government support, it is impossible to do our work on an extensive scale. We have no State education for the hearing children even. The students have to find their own expenses. We receive very paltry aid from the Government. For the instruction of 1,363 pupils, the Government pays about 2,500 rupees per month; i. e., 2 rupees per capita per month, or a little above 50 cents per head per month.

There is no denying of the fact that we have been much benefited by the British rule. But when it is necessary, it is better to call a spade a spade. These 200,000 deaf people of India are a heavy economic and social loss to the country. It behooves any government to see that they are properly educated. Whenever we approached the Government for increased aid, the reply was "There is no money in the treasury." But they have money to spend extravagantly on other heads, which are not conducive of any national benefit. They can ear mark for 20 years to spend several millions of dollars per annum to build the viceregal palace at Delhi, a palace which will outshine in its grandeur many European royal courts.

They can spend a major portion of the revenue under military head at the expense of the crying needs of the country. Last year there was a retrenchment commission in India to readjust her finances. Most unfortunately the ax of the commission has fallen most heavily on the education department. I am, however, optimistic and hope for a better day, when we shall have sufficient oil to run our machine.

In 1916, Sir Sankaran Nair, the then education member to the imperial council, issued a circular regarding the education of the defectives, and wanted opinions and suggestions from the few schools for the deaf and the blind then existing in India. My father drew up a very able scheme for the spread of the education of the deaf in India. But most unfortunately the Jallinwallabugh massacre happened shortly after this, over which the cabinet of the viceroy differed, and Sir Sankaran Nair had to resign his portfolio. As is usual with the red tape of India, along with the exit of Sir Sankaran, all his so-called unnecessary files were shelved out. I am afraid this is true of all the red tapes in the world, when we see that politics is so degenerating that even in America it interferes with educational institutions and removes the head of the Kansas school from his chair.

I shall now give brief accounts of the other schools in India.

BOMBAY.

The Bombay Presidency has two schools: (1) The institute for deaf-mutes, the first school for the deaf in India. The present number of pupils on the roll is 23 with 3 teachers. The language taught is English. (2) Professor Date's Deaf-mute Institution. There are 35 pupils with 6 teachers.

BENGAL.

The Bengal Presidency has four schools: (1) The Calcutta Deaf and Dumb School, which, as I have already told you, is the leading school in India. (2) The Barisal Deaf and Dumb School. It was started in 1911. The head master, Mr. H. N. Mukherji, was trained in the Calcutta school. (3) The Dacca Deaf and Dumb School. It was started in 1916 by Mr. J. C. Kusari, who was for several years an assistant teacher in the Calcutta school. The present number of pupils on the roll is 19. The government pays a monthly grant of 45 rupees, or about \$15. (4) The Faridpur Deaf and Dumb School. It has been very recently started by Mr. C. H. Ghatak, who was also for several years an assistant teacher in the Calcutta school. This school is purely a private enterprise and receives no government support.

MADRAS.

The Madras Presidency has two schools: (1) The School for the Deaf at Palamcottah. It was started in 1898 by Miss Swainson, of the Zennana Mission of the Church of England. The total number of pupils on the roll is about 130, with 16 teachers. It is rather a technical institution. The head of the school is British, who was trained in England. (2) The School for the Deaf at Mailapur. It was also started by Miss Swainson. There are 40 pupils, with 6 teachers. The head master was trained in England.

BARODA.

The State of His Highness the Gaekwar of Baroda has two schools. (1) The Baroda Deaf and Dumb School, and (2) the Mehashana Deaf and Dumb School. The headmasters were trained at Calcutta. There are 48 pupils between the two schools.

MYSORE.

The State of His Highness the Maharaja of Mysore provides for the Mysore Institute for the Deaf and the Blind. The head master was trained at Calcutta. This is the only school in India where the deaf and the blind are taught in the same building.

AHMEDABAD.

The Ahmedabad School for the Deaf Mutes. It was started in 1916 by Mr. Lalulehai Desai, who was trained at Calcutta. Mr. Desai has a deaf son. The school was the result of his endeavor to teach his son.

NAGPUR.

The George Institute for the Deaf Mutes. It was started in 1913. There are 13 pupils and 4 teachers.

THE PUNJAB. I think I think it is easier
The Sushila Memorial Deaf and Dumb School. It had a very short life. It was started in 1914, but was shortly afterwards closed down for want of funds.

We have had only a small span of life, but I hope the day is coming when we shall have more money, more teachers to take up this work, and then we shall be able to say that we are on a par with you.

I thank you. [Applause.]

DOCTOR HALL. I know that you will all agree with me in giving Mr. Banerji first a rising vote of thanks for his very interesting talk, and, second, the best wishes of us all personally and of the Convention of American Instructors of the Deaf for his successful career in India, where we know he is going to do a great work.

(The convention rose.)

Would anyone like to ask Mr. Banerji any questions about his work, about his school work, or other work in India? I am going to ask him one myself.

Do you teach girls in your school?

MR. BANERJI. Yes; we teach girls, but we can not have any girls from outside the city, because we have no boarding arrangements for them. I don't know about the school at Balankota. They may have. That is a missionary school and they may have some money for that work.

A VOICE. By what method are the pupils in India taught?

MR. BANERJI. All by the oral method. We follow the oral method, and the teachers who are trained in our school carry back that idea. At the Balankota School they have teachers trained in England, and naturally they use the oral method.

DOCTOR HALL. I am going to ask Mr. Banerji what is the principal language taught in the schools to the children?

MR. BANERJI. The vernacular of the Province. In our schools we teach Bengali to those who come from the Province of Bengal; to those who come from the northern Provinces we teach Hindustanee, and to some of them in the higher classes we teach a little English.

DOCTOR HALL. Then in the other Provinces where they have a different vernacular you teach that vernacular?

MR. BANERJI. Yes, sir.

DOCTOR HALL. How many different vernaculars do you think the schools represent?

MR. BANERJI. Quite a number.

DOCTOR HALL. Each one of these Provinces that you mentioned in your lecture uses a different vernacular?

MR. BANERJI. Yes. Bombay uses one. But of course with Hindustanee you can travel all over India. The graduates of our schools generally do not go out of their own Provinces. They find their own work there.

DOCTOR HALL. You want them, then, to speak the language of their fathers and mothers?

MR. BANERJI. Yes.

MR. WEAVER. Do you find it more difficult to teach a vernacular than English to the deaf?

MR. BANERJI. No; not more difficult, but these boys and girls want to talk to their parents, to their fathers and mothers and sisters, and naturally they want to talk in their own vernacular.

Doctor HALL. I think Mr. Weaver means do you think it is easier for them to learn that vernacular, is it an easier language to learn to talk than English?

Mr. BANERJI. Naturally, because when they talk with other people in their home they talk in their own vernacular, and they have to practice that.

Doctor HALL. He means, I think, about the difficulty in the formation of the sounds.

Mr. BANERJI. In that I think the Bengali is rather easier than English, because we have no secondary spelling and every sound has a second letter.

Doctor HALL. It is a phonetic language?

Mr. BANERJI. More phonetic, yes; and we haven't soft vowels, and that is quite a difficult thing to teach.

Mr. BRILL. Do you have different characters for writing and for spelling?

Mr. BANERJI. Yes; we have different characters, but somewhat related to one another.

Miss HENDERSON, of the Horace Mann School, Boston. Will you write the alphabet the way you did when you came to the Horace Mann School? I think it would be very interesting.

(Mr. Banerji wrote on the blackboard.)

Mr. BANERJI. Our alphabet is clearly divided into two portions, vowels and consonants. We do not have them mixed up as you have them in your alphabet.

These are all simple vowels [indicating], and now come diphthongs. For this diphthong there is no corresponding English sound. It is not two elements; it is not a glide, but the two elements have been mixed to form a distinct third vowel. It is "a" but not like short "a".

A VOICE. How many letters are there in your alphabet?

Mr. BANERJI. Some 40 or 42, one for each sound. And our consonants are arranged in groups of five according to the organs you use. You first take the back sound of "k", and you take the radical and then go with the "kh," but there is no sound like that in your language, then two vocals and then the nasal.

(Mr. Banerji wrote on the blackboard in response to a number of requests.)

Doctor HALL: I am sure we are very grateful to Mr. Banerji for his kindness in explaining these things to us.

Miss X. I would like to know why in all these schools the boys are given preference over the girls?

Mr. BANERJI. They are not given preference, but we can not afford to have a separate boarding house for them.

Doctor HALL. She means why don't you take the girls and put them into the boarding house?

Mr. BANERJI. Because in every country, even in America, though you have equal rights, the boys are more important from the viewpoint of economics.

Doctor HALL. I thought perhaps we might call on another visitor this evening, one who is not a teacher of the deaf but one who is interested in the deaf, and who has come as a Government research scholar from Japan, Mr. Kawamoto. Can't you tell us what you expect to do here, Mr. Kawamoto?

Mr. KAWAMOTO, of Japan. I have no paper prepared.

Doctor HALL. This gentleman is one of the Government research scholars sent from Japan to this country. I have not talked with him long enough to know whether he is also holding an official position in connection with the board of education or the State educational board. I am not quite sure about that, but I know he is in this country to study schools for the deaf and expects to go around among some of our schools this fall after they are opened, and then go back to his country to report on work being done here. Is that right?

Mr. KAWAMOTO. Honorable President, ladies and gentlemen, I am very much pleased to have the opportunity of attending such a splendid convention and of meeting so many instructors of the deaf in the United States and Canada.

The national department of education of Japan has appointed me to make a study of methods of educating the deaf and blind in America. I came to the United States last November, and since that time have spent four months in the Perkins Institution for the Blind in Boston and three months at the Clarke School.

The education of the deaf in Japan began about 50 years ago through the efforts of missionaries. Now we have 70 schools and about 3,000 pupils under instruction. In Japan there are four kinds of schools classified according to their means of support—governmental, prefecture, city, and private. In some of these schools the combined method of instruction is used; in others the oral method; in others the manual.

Besides the regular academic courses of study, drawing, manual training, woodwork, sewing, housekeeping, knitting, tatting, agriculture, carpentry, and Japanese painting are taught in some of our schools. Upon my return I shall advise that millinery and printing be added to these courses.

By law every Province is required to have at least one school for the deaf. Ninety-nine per cent of all hearing children in Japan attend school. Probably no other nation in the world can show so high a percentage of attendance. The attendance of deaf children up to the present time has not been of so high a per cent, but we think that 50 per cent of our deaf children are in school, and with a new compulsory school attendance law we expect an even better attendance.

In the Tokyo Normal School we admit deaf pupils who are given courses of instruction of three or four years in agriculture, woodwork, drawing, painting, sewing, and knitting. In this same school is given a normal course somewhat like the one given at the Clarke School; students taking the normal course to prepare themselves to become teachers of the deaf are allowed 300 yen (\$150) per year.

With all my heart I trust that the friendship that has long existed between this country and Japan may continue. You have helped us much in the past; you have given us many ideas that we now utilize in our teaching of the deaf. For all this we thank you.

Mr. TATE of Minnesota. How long is the educational course and about how many deaf children and blind children are in your number?

Mr. KAWAMOTO. The proportion?

Mr. TATE. Yes.

Doctor HALL. I understood him to say there are about 6,000 deaf, about 3,000 in the schools, and they have enacted a compulsory law

to send them all to school, as nearly as possible, and they hope in a few years to have a pretty nearly perfect attendance. Is that correct?

Mr. KAWAMOTO. Yes. There are 6,000 deaf children in the country and the school age is from 6 to 14.

Mr. HAYCOCK. You mean the blind?

Mr. KAWAMOTO. No; just the deaf.

Doctor HALL. Do the boys and girls both go to school?

Mr. KAWAMOTO. Oh, yes.

Doctor HALL. To the boarding schools?

Mr. KAWAMOTO. Yes.

Doctor HALL. Some are boarding schools and some are day schools?

Mr. KAWAMOTO. Yes.

A Voice. Do they teach them to speak?

Mr. KAWAMOTO. I want to say that our schools for the deaf use the manual method. The Kobe school installed the oral method two or three years ago, and it is my duty to study the oral method and to introduce to our teachers the oral method.

Doctor GOODWIN. I would like to ask, what is the population of Japan now?

Mr. KAWAMOTO. Forty million six hundred thousand. There are 8,000,000 school children from 6 to 14.

Mr. BANERJI. That is in school or of school age?

Doctor HALL. That is 6 to 14?

Mr. KAWAMOTO. Yes.

Doctor HALL. Do you have a method of spelling? Do you have an alphabet?

Mr. KAWAMOTO. No.

A Voice. How do they talk to one another, those who have never been to school?

Mr. KAWAMOTO. By natural signs.

Doctor HALL. What do they teach the girls to do with their hands, what kind of work?

Mr. KAWAMOTO. Sewing and hair dressing and tatting.

Mr. HAYCOCK. I would like to see some Japanese characters on the board.

(Mr. Kawamoto wrote some Japanese characters on the black-board.)

Doctor HALL. Does the Government support all of your schools?

Mr. KAWAMOTO. No; only one. The others are public and private, There are three kinds.

Doctor HALL. Is the Tokyo school supported by the city or by the Imperial Government?

Mr. KAWAMOTO. The Tokyo School for the Blind is supported by the Government.

Doctor HALL. Then some of the schools are private?

Mr. KAWAMOTO. Yes.

Doctor HALL. With no Government support at all?

Mr. KAWAMOTO. Yes. In Tokyo they are supported by the city. Some of them are supported by the cities, some are private and some are supported by the Government.

Doctor HALL. Some are under the control of the Government, some the prefecture, some of the city and some private.

Mr. KAWAMOTO. Yes; four kinds.

Doctor HALL. Mr. Banerji, would you like to have the editors of the school papers send the papers to your school? Calcutta School for the Deaf, is that enough?

Mr. BANERJI. Yes.

Doctor HALL. And when you return home, how can we send you the papers of the schools here, Mr. Kawamoto?

Mr. KAWAMOTO. To the Department of Education, Tokyo, Japan.

Doctor HALL. There is no further formal program for this evening. We hope that anyone who wishes to stay in the hall here for a time will feel free to do so. We will try to find someone who can play the piano.

We will meet in the morning at 8 o'clock.

(Whereupon, at 9.30 o'clock p. m., the convention adjourned until 8 o'clock a. m., Saturday, June 30, 1923.)

SIXTH DAY, SATURDAY, JUNE 30, 1923.

PROGRAM.

8 a. m.:

General session, the president, Dr. Percival Hall, presiding.

8 to 8.30 a. m.:

Paper, "Gallaudet College—"What students need before coming," Dr. Charles R. Ely. Discussion.

8.30 to 9 a. m.:

Paper, "Influence of Boy Scout work and military training on character," Supt. Ignatius Bjorlee, Maryland School. Discussion.

9 to 9.30 a. m.:

Paper, "Character building," Dr. J. Schuyler Long, Iowa School. Discussion.

9.30 to 10 a. m.:

Paper, "A health program for the school for the deaf," Dr. Harris Taylor. Discussion.

10 to 10.30 a. m.:

Paper, "The visual highway to knowledge," Mr. H. E. Thompson, New Jersey School. Discussion.

Resolutions.

Adjournment.

God save our gracious King!

Long live our noble King!

God save the King!

Send him victorious,

Happy and glorious,

Long to reign over us,

God save the King!

My country, 'tis of thee,

Sweet land of liberty,

Of thee I sing;

Land where my fathers died!

Land of the Pilgrims' pride!

From every mountain side,

Let freedom ring!

Two empires by the sea,

Two nations great and free,

One anthem raise.

One race of ancient fame,

One tongue, one faith, we claim,

One God whose glorious name

We love and praise.

MORNING SESSION.

The convention reassembled at 8 o'clock a. m., Dr. Percival Hall, presiding.

Doctor HALL. I will call the meeting to order now, hoping that we will soon have a larger attendance, and that we can finish our program promptly.

Our meeting this morning is really a general session with several papers, the first of which is a paper on Gallaudet College, "What students need before coming," by Dr. Charles R. Ely. I will ask Doctor Ely to give us his paper at this time.

Doctor ELY. Mr. President, ladies and gentlemen, the subject of my paper is "Gallaudet College—What students need before coming."

GALLAUDET COLLEGE—WHAT STUDENTS NEED BEFORE COMING.

By Dr. CHARLES R. ELY, Gallaudet College.

That a large percentage of students entering Gallaudet College resign, or are dropped, during the first two years of the course, is a fact known to the members of this convention.

Experience has shown that, under conditions as they exist, only about one-third of the students entering the college may expect to graduate. The reasons for this state of affairs are many, but may be classified under three heads: (1) the standards and the limitations of Gallaudet College; (2) the character, circumstances, physical condition, and capabilities of the student; (3) the preparation of the student before entrance.

The writer is well aware that many suggestions may occur to those present as to changes which appear desirable in the requirements, equipment, or other conditions in the college. It is with no desire to evade or to shift responsibility that this aspect of the case is not considered here, and that the discussion is confined to the subject assigned.

The rating of a student based on his entrance examinations is often not a safe indication as to what his standing will be after he becomes a member of the preparatory class. In a recent class, for example, which numbered about 50 students at entrance, only about 30 were left at the end of the first year. Of these 30, 2 who had been placed on the waiting list on account of their low standing in the entrance examinations, and who had been the last admitted were found to rank third and ninth, respectively, at the end of the first year.

It will be seen from the above statement that the college is admitting a much larger number of candidates to the preparatory class than can be expected to meet the requirements after entrance and receive degrees. It means, in brief, that admission is in a great measure probationary, and that the new student can not be considered to have made a successful start until after having satisfactorily completed the work of the preparatory class. The real test, therefore, of the student's preparation and ability does not consist in merely meeting the entrance requirements.

It is not meant to imply that the condition above referred to is, in all respects, undesirable. There is much to be said for an arrangement which permits a large number of students to enter and, after giving them a chance to prove their worth, retains only the best. It is, however, realized that for many who are engaged in preparing students for college there has been little to guide them as to what is desired except the published entrance requirements.

In obtaining the material for this paper the writer has received many suggestions from his colleagues on the faculty of Gallaudet College, and from students and alumni. Some of these suggestions will be here briefly stated, without any attempt to develop them at length, with the belief that some of them may prove useful, or may bring out other suggestions in the discussion which it is hoped may follow the reading of this paper.

Cultivation of the imagination should be given particular attention in the education of deaf pupils. The importance of this lies in the development of originality and independent thinking. The more one does his own thinking the better fitted he will be to appreciate and understand the thoughts of others. An active intellect will be developed as compared with one which is passive or absorptive.

Pupils should be taught how to study. It is not enough to see that they spend an hour or two with their books in hand or even to note that they are exerting themselves. A great deal of wasted effort is due to wrong methods of study or to lack of proper concentration.

There should be no gap between school and college work. Some very capable students have found themselves almost hopelessly handicapped because of what may have appeared, to those sending them, to be only a slight deficiency in their preparation. This applies especially to the preparation in arithmetic and algebra.

A great deal of benefit is derived by college students from their various organizations, and there should be some preparation for this experience in self-government, holding of offices, and in assuming various responsibilities. The cultivation of a sense of responsibility is of the highest importance, and much might be gained by permitting a certain amount of self-government of student activities in the work of the schools.

As one student states it, "A boy should not come to college 'broke.'" He will find it very difficult, if not impossible, to meet the college requirements and also find time and opportunity to earn enough to pay his personal expenses. A number of schools provide traveling expenses of, or otherwise assist, deserving candidates. The required outlay is so small, compared with what is furnished free of cost, that it is hoped that some means may be found by other schools of meeting the needs of deserving students, who would otherwise be deprived of the opportunity of continuing their education.

Instruction should be given in the use of books of reference. The faculty of Gallaudet College has found it necessary to require the members of the preparatory class to take a course in "Use of library." Students sometimes come to college who do not even know how to find a given article in an encyclopedia. An example may be cited of one student who reported that he could not find "Amazon" and that the nearest he could come to it was a book which had printed on the outside "A-Ana."

Physical fitness is of the greatest importance and every effort should be made to send students to college in good physical condition. It is true that certain disabilities do not prevent a young man or woman from acquiring a higher education, but careful thought should be given to the nature of the ailments or disabilities before deciding that a college course is desirable, or even possible, for the one under consideration.

The question of moral training is not here given more space because its importance is fully realized by all educators, and needs no discussion. It is believed that no effort is being spared in this direction in the schools for deaf children and that it is understood that such training should be given at the earliest opportunity and that it is most efficacious during the early years of a child's training.

In the foregoing we have only outlined a number of suggestions as they have come to us, without any attempt to arrange them in any particular order as to their importance from the writer's point of view.

In the following an attempt will be made to point out the more important causes of failure by students, after entering college, as the matter is viewed by the writer.

It is a generally recognized fact, from the standpoint of scholastic preparation, that more failures are due to a lack of adequate understanding of the English language than to any other cause that may be mentioned, if not more than to all other causes combined. It is very desirable that a student should be able to express his thoughts in good, understandable English. It is absolutely essential that he should be able to gain a clear comprehension of what he is required to read or study. It may seem unnecessary to dwell on a truth which appears to be so self-evident, but it is a fact that students are sent to Gallaudet who are hopelessly handicapped from the start because of this lack of understanding of English.

For some constructive suggestions in regard to the teaching of English the writer takes occasion to refer to an article by Prof. Herbert E. Day, in the American Annals of the Deaf, for May of this year, entitled, "A plea for word study."

I think Professor Day was probably induced to write this very largely by the needs of the students as they appear to us in the college, and therefore it particularly applies to this case in hand.

Next to English in importance is the preparation in arithmetic and algebra.

According to the requirements for graduation from Gallaudet, any student who has a permanent condition in any study of the preparatory class will not be granted a degree. As the study of algebra and geometry are pursued throughout the first year, it is therefore evident that a lack of mathematical ability, or inadequate preparation in the fundamental principles and processes of arithmetic and algebra, makes it very improbable that the entering candidate will be successful in his mathematical courses the first year, and, in consequence, he will be ineligible for a degree.

To be more specific, it is a matter commonly noted that while the student is usually well drilled in the processes or operations, he is very often weak in his understanding of relations. Only too often it is necessary, as late in the course as the sophomore year, to correct simple errors in problems relating to ratio and proportion. One can hardly place too much emphasis on this portion of the subject in teaching arithmetic. A clear understanding of ratio and proportion, with its methods, and its limitations, in measuring and comparing things of the same kind and of different kinds, has a much deeper influence on clear and accurate thinking than is generally recognized. There is often observed an inability, and sometimes an unwillingness, to analyze or state a problem in a mathematical form, whereas the student is perfectly capable of, and enjoys, performing the indicated operations.

The last statement leads us to the next thought, which is connected with methods of preparation.

A number of years' experience with graduates of schools for the deaf leads to a belief that they are, in very many cases, too dependent on their instructors and are unable, or unwilling, to do their own thinking.

The fact that deaf children need special training is the reason for the establishment of schools for the deaf throughout the world. It is also true that this very deafness is what makes it of the utmost importance, not that they should be continually helped, but that they should be taught how best to help themselves.

There is a very serious danger that the sympathy felt by a teacher of deaf children for those placed in his or her care may lead to methods of instruction which make them more and more dependent. Unless we teach our pupils how to depend upon themselves, they will be, upon leaving school, like a cripple suddenly deprived of his crutches.

Many students who come to us seem to be unwilling or unable to make any sustained mental effort. If something is difficult to understand, this is deemed a sufficient excuse for not trying to overcome the difficulty, and the task is laid aside until help and explanation can be obtained from the teacher. Oftentimes the student seeks an easy way out of his perplexities by trying to evade a question rather than to search patiently for the correct answer.

It is quite possible that this dependence of the pupil on his instructor may be due in large measure to a belief on his part that because of his deafness he ought to be an object of sympathy and therefore to be helped over all his difficulties. There is a special and a serious danger that a willingness to receive help, on all occasions and from any source, may be developed which will lead to habits of dishonesty in the classroom and in examinations. It is believed that many students do not realize the seriousness of handing in work as their own when they have received help from unauthorized sources. The effect of this in seriously undermining the character is evident.

Many students need to have revealed to them the satisfaction which comes from performing a difficult task by one's own unaided efforts. The deaf child should be shown that, although because of his deafness many things will be harder to accomplish, yet, because of that very fact, success is all the more commendable. He must be helped often and to a great degree, but only in such a manner as may enable him to become more self-reliant, and the reasons for helping him in this way should be carefully explained to him.

The writer's limited experience with pupils of school age disqualifies him from giving advice as to the best methods for developing independence and resourcefulness in the young. More opportunities are perhaps afforded to those who have to deal with older students, but the results to be obtained are probably of less value because the student is less impressionable than at an earlier age.

The apparent helplessness of some college students is pathetic. The writer has had questions brought to him in the classroom which were fully answered in the textbook which was in the hands of the one seeking information at the time the question was asked. All that was necessary to obtain the information sought was the knowledge how to look up a word in the index and to find an indicated page.

It is the writer's endeavor in his classes to help a student to answer his own questions in so far as this is possible. The discovery that he is able to find for himself, in good books of reference (or by experiment), the knowledge which he desires and explanations of his difficulties which are as helpful as any that his teacher can give (and often even more helpful), is often of the utmost benefit in bringing to him the realization that he is no longer wholly dependent upon his teacher. Sensible questions should always be answered, and necessary help should not be too long withheld lest the seeker after knowledge become discouraged and cease his questioning, one of the worst things that can happen in the education of anyone.

It is realized that the presentation of the subject here treated gives but one side of the question, as it is viewed from the standpoint of those who have to deal with students after they have entered Gallaudet College. It is hoped that some of those engaged in preparing students for college work will share their experience with us and tell of the needs of the young men and women they are preparing and what is being done to meet these needs. A knowledge of what is being done will assist greatly in bringing about a broader and a sympathetic understanding which will enable the college to make a better adjustment of its methods, to the end that it may make the most of its opportunities toward the education of the young men and women intrusted to its care.

Doctor HALL. We have enough time, I hope, for discussion of each paper. I shall be very glad to have anyone discuss Doctor Ely's paper, or ask him any questions or make any suggestions you desire.

Mr. JONES, of Ohio. Mr. President, I just want to ask one question, whether you have any statistics showing how many freshmen entering college—hearing colleges—graduate.

Doctor HALL. I have not myself, Mr. Jones, any statistics. I note in connection with one or two colleges with which I am familiar that probably 60 to 75 per cent go through. But I think Doctor Ely will tell you, and you will notice in his paper that there are certain influences in our college that do not operate quite so strongly in other colleges. The question of means is a very difficult one for our boys and girls. Most of them come from families which can give them very little support. I think that a good deal higher proportion of the boys and girls in our colleges for hearing people have better support behind them. Very few of our boys and girls have much means.

Doctor DOBYNS, of Arkansas. I understand, Doctor, that you say 60 per cent of the students in the hearing colleges, 60 per cent of the freshmen, go through the colleges?

Doctor HALL. I should think so.

Doctor DOBYNS. That is a pretty high per cent.

Doctor LA CROSSE. That is pretty high.

Doctor ELY. It varies.

Doctor HALL. Maybe I am wrong. I should think 60 per cent would be about right. You think it is less than that—50 per cent?

Doctor LA CROSSE. I think it is even less than 50.

Doctor HALL. That has not been my experience, but I will be very glad to look that up.

Mr. JONES, of Ohio. I was just hoping we might get a line of comparison.

Doctor HALL. I think the question of financial support is one of the difficult ones.

May I add just one word there about that question of aid from the State, if I may? It has been a very helpful thing to many of our boys and girls at some half dozen, or possibly 10, different schools to have aid in the form of grants of from \$50 to \$200 per year. In the old days we were able to obtain from the railroads for our students

half rates when the rate was 2 cents a mile, which meant that they could travel for 1 cent a mile. Now you know what the rates are—three and one-half times as much as that. They can get no reduction whatever, so their car fare is costing them three and one-half times what it used to 20 years ago.

Mr. DRIGGS, of Utah. While you are on that question, last year we sent three students from Salt Lake City and Ogden to Washington, and they received from the rehabilitation fund of the Government half rates—at least, the Government paid it and through the rehabilitation department the State received that much. I don't know that you know that most States now through the rehabilitation department are able to help your deaf boys and girls get to college. We have had two or three at the State university and at the agricultural college, as well as at Gallaudet, and all have been helped by means of those funds.

Doctor HALL. I am very sure we are all glad to have that word. I hope it will be passed around to everyone.

Miss HENDERSON, of Boston. Doctor Hall, we have two girls from the Horace Mann School last year who were put through the course in a business college—Bryant and Stratton's—their expenses being paid by the State. Miss Adams found that they could take them in under the "physically handicapped."

Dr. J. SCHUYLER LONG. We get \$500 every year to help pay car fare, to buy their books and pay other necessary expenses.

Doctor TATE, of Minnesota. Minnesota has funds for railroad fare to and from school.

Doctor HALL. That is a very great help, that railroad fare.

Doctor DOBYNS, of Arkansas. Arkansas must not be left out. Arkansas pays \$100 now, and after this I think will pay for each student who goes to Gallaudet just what it costs them at home to take care of the others.

Mr. DRIGGS, of Utah. I don't want you to overlook one great fact: The Government of the United States to-day is appropriating millions of dollars for rehabilitation, and any State that matches the appropriation uses half of Uncle Sam's money and half of its own, and the law in most of the States—at least in our Western States—does not say it shall be a soldier who has been injured, but anybody who needs to be rehabilitated, a deaf person, a lame person, a blind person. If you will get next to your rehabilitation department director he will help your deaf children to Gallaudet College or to a technical school.

Doctor HALL. I hope that each one in charge of a school will look into that question. It is a very important matter.

May I just say that I know that Colorado and Florida give assistance to their graduates. Is anyone here from Florida? Mr. Underhill is. There are several States besides those mentioned which do help their students. I am very glad to make that known.

Mr. O. A. BETTS, of the Central New York Institution. We have a girl who is being helped in different ways to get through her course at the Central New York Institution. Sometimes she is given the opportunity to earn money by different people and organizations.

I also wish to say, in regard to pupils attending Gallaudet, one of my boys wishes to go to Gallaudet and has a fund that the Rotary Club at home has given him, all the money he needs.

Mr. JONES, of Ohio. Mr. President, there is a former pupil of the Ohio school taking linotyping in the school under the rehabilitation act, and the Government pays her tuition at the rate of \$20 per month. I had never thought of it with reference to sending the children to college, but this thought comes to me: This paper emphasized the fact that the students in college appear to be unable to rely on themselves; is there any danger that by furnishing the money and putting them in college and keeping them there is going to accentuate the feeling they have that somebody must always be carrying them around?

Doctor HALL. That is a very important matter, I think, Mr. Jones. I want to say this: That our boys and girls are not spoiled as far as being too proud to work is concerned. They always ask for work. They shovel coal, they mark out the tennis courts, they work on the farm, they will work for the members of the faculty in their homes. The girls will sew or clean or wait on the table. We give them all the work we can. They do printing and painting and all kinds of things. They are anxious to earn money for themselves, and I think as far as that goes they show a very fine spirit, but I think Doctor Ely's point was particularly in regard to their ability to handle lessons given out in the classroom when they go back to their rooms to study; that many of them seem to be unable to go ahead by themselves, and they are apt to postpone and say, "Well, we don't know how to do this. We will wait till the teacher tells us how." Now, whether any of that is our fault or whether they get into that habit before they come is a question. I think they must have been too dependent, perhaps, before they came. As Doctor Ely says, many of them do not know how to use reference books. Our librarian for the last three years has given to the introductory class a course on the use of the library. She has to show many of them—it seems as though for the first time—how to go and look things up from reference books in our library—how to look up a topic.

Mr. H. E. THOMPSON, of New Jersey. It might be interesting to say that the Knights Club of boys in their teens, between 14 and 20, on their own initiative started a scholarship fund. They engaged a hall. The owner let them have the hall free; then we got moving pictures and they put them on and started the nucleus of a scholarship fund. Out of this scholarship fund these boys expect to help our representatives in Gallaudet College.

Mr. WEAVER. Mr. Chairman, Doctor Ely in his paper brings up a very important phase of our work. At Gallaudet College we have the means of testing the work of schools generally.

I remember reading some years ago a paper by one of the professors of Gallaudet—I think the paper was entitled "What do they need?" It dwelt a great deal on the doctor's observations about the pupil's lack of comprehensive power, imaginative power, and so on. I think that is a very important thing.

I would like to ask Doctor Ely if of late years pupils have shown greater power to think for themselves, or whether he has found that their thinking has been much along the same lines as in previous years; whether the general power to think, the power of independent thought and imagination, has improved? If it has not, it seems to

me it shows a general lack of mental development, and that is what our schools are for.

Doctor ELY. Well, it is rather difficult to answer a question offhand and to make a comparison like that. I would not like to attempt to answer so quickly, but my impression is that there is very little difference. It is something that has been with us for a long time and will still be with us for a long time. I believe the natural feeling of sympathy, the desire to help the pupils, has gradually brought them to be too dependent on those who are instructors. I think that is more in evidence with deaf than with hearing children.

Mr. JONES of Ohio. Mr. Chairman, I have been tremendously interested in preparing students for college. Sometimes the best of them go and sometimes the poorest. We try to prepare as many as possible, and perhaps prepare too many; but this address reminds me of what takes place annually.

At the opening of school I begin at the top to see if better work can not be done. The high-school teachers say, "Why, Mr. Jones, if you could only prepare them in the intermediate for the high school we could do our work." Then I go to the intermediate to whoop it up there and the teachers say, "Mr. Jones, if you could only get work done better in the primary, how much more we could do in the intermediate."

On I rush to the primary grades. The overworked teachers say, "Oh, Mr. Jones, if the pupils could only be taught something before they come to us. You know they can not talk, read, or write; they can not spell; they do not know the names of their parents. They do not even know their own names. We have to teach it all; elements, words, writing, spelling, language, articulation, number work, politeness, kindness, in fact, all the virtues. The children come to school seven years retarded in comparison with hearing children; in spite of all the work we must do we send them on to the intermediate school only five years retarded."

Then I go back to the intermediate department with the report of the primary teachers. I say, "They have done nobly. They have removed two years of retardation. How much have you removed?" Then they tell me that after five years of hard labor, according to Doctor Pintner's report, they have removed two years of retardation. I say, "Good enough," and on I go to the high school with the report that the primary and intermediate teachers have removed four years of a gap between hearing and deaf children. What are you doing? And the high-school teachers pull out Doctor Pintner's report to show that they have removed one year of retardation.

But in spite of all that they must enter college 2 years retarded. We turn to good old Gallaudet and its able and distinguished president and say the institutional schools in 12 years have narrowed the gap of retardation between the deaf and hearing children from 7 to 2 years. Now, you have 5 years in which to remove the other 2 years. Can you and your able faculty do it?

We forget this great thing, that we are handling handicapped children.

We forget also that hearing children are just about as weak in some other way.

One of the nicest, brightest girls came to take a position as stenographer in the Ohio school. I soon found that she knew language

imperfectly. Later I found that she knew but little mathematics. When I asked her to find out how much money she had by collecting, 15 cents from each of 170 children for transfer of baggage, she shot out of the room and in about an hour came back with a handful of adding-machine ribbon. She had added 15, 170 times. [Laughter.] She was a graduate of one of the best high schools in Columbus; had had two years in the university, and had taken a business course.

When I asked her to find what per cent of the pupils were congenitally deaf, 249 out of 541, she said, "Oh, Mr. Jones, I heard something about percentage one time, but I don't know anything about it." "Well," I said, "divide 249 by 541." After reflection she said "You can't do that; 549 is larger than 241." I said, "add two ciphers and see how it looks." By and by I asked for her result. She said, "I don't know anything at all about it." So it is not only the deaf children that are having this trouble, but the hearing schools are full of it. We should not bewail our condition, but always try to win in spite of it. We should respond with full and glad hearts to remedy it.

Doctor ELY: I thoroughly agree with Mr. Jones, and I don't want the members of this convention to think for a moment that I intended anything in the nature of holding them up for severe criticism because they were not doing what they ought to, and that sort of thing, but merely to give you what, to the best of our ability, is our observation of their needs as they come to us, and we know that you are doing all you can to help them along the line.

Mr. DRIGGS, of Utah. Mr. Chairman, I am glad to have heard Mr. Jones say what he did, but I also would like to know from Doctor Ely, of Gallaudet College, some of the things that our boys and girls do not know. It is sometimes a good deal easier to have somebody else find out what is the matter with you than it is to find out what is the matter with yourself.

O wad some power the giftie gie us
To see oursels as ithers see us!

And it is a splendid thing for us to know that we should go back home and teach our boys and girls to use the dictionary, if we haven't been doing it. I know one school in the United States where the boys and girls are doing fairly well, and I am going to see that they do better in the future.

Mr. BRILL. Mr. Chairman, in most cases we can not prepare classes as a whole for Gallaudet College. In other words, we can not give the whole time of the teacher to those preparing for Gallaudet College. There are usually only one or two in the advanced grades, and it seems to me it ought to be comparatively easy to make the pupils rely on themselves. If you can't do anything else you ought to put them in a room by themselves and say, "Do your required reading." In that way the teacher will have time to answer questions but will also have time for other things. One of the best ways to handle a student is to tell him that you will help him when he gets stuck; otherwise he has got to look out for himself. I have had the best results in that way in the last year with a boy who has passed his college examination; he got very little help from me, for one reason that I did not have the time, nor did anybody else in the school, and he will probably be one of the best pupils we have turned out.

Mr. PITTINGER of Indiana. Mr. Chairman, where the admission of students depends strictly on an examination, it seems to me that the examination should be general enough so that the education from any textbook would be understood—I mean the questions will be understood in the light of that education. I think it would be interesting to know what this group right here would have done with the examination in grammar this last time. I should like to see the papers of this group right here if they took that examination in grammar.

Doctor HALL. They don't have to pass examinations any more [laughter], for which they are very thankful.

Mr. PITTINGER. It was a very technical examination.

Doctor HALL. I will say, Mr. Pittinger, that I have heard the same criticism from other heads of schools, and we are going to take that up this fall as soon as we get together, and see what we can do, and attend to anything else that needs attention.

We are very glad to have these criticisms. I have heard no criticisms of the examinations in arithmetic and algebra. I think they were considered pretty fair, though we put more problems into the algebra than we ever have done before, feeling that we want more of just what Doctor Ely says, the ability to think rather than knowledge only of the mechanical operation.

Mr. PITTINGER. The questions there were general in both of those subjects, and any language which would be used in the subject would be understood there, but I felt that in grammar it was different.

Dr. HARRIS TAYLOR, of New York. I think it is unjust, perhaps, or at least unfair to Gallaudet College anyway, to say that the examinations, the entrance examinations, are too hard, simply because there is a question whether or not we can pass the examination. I don't regard that as a standard at all. We may or we may not be able to, but we are here and we are not going back on the returns. That is not a fair test of what an examination for young folks should be.

Doctor HALL. I think this discussion is going to help us at college, and I hope we will have some thought on this whole question that Doctor Ely has brought up, particularly that question of making the students more independent in their studies.

Now the time has gone by for further discussion, unless someone has something very important to mention on this paper.

Mr. E. McK. GOODWIN. Doctor Hall, for the last two years, at least, there has been a good deal said about mental efficiency and surveys in psychological tests.

Last spring Dr. Harry Crane in charge of the department of abnormal psychology in our university, with whom I had been corresponding, came in to see me, and he said, "There isn't any of your staff from superintendent down that is acquainted with these examinations." I told him the superintendent was too busy to take it, and the principal was too busy, and the teachers were afraid of it.

There were a number of our pupils in the high school department that did quite as well in mental efficiency tests as many of the teachers and without making any thrust or comparison against the teacher, the question has arisen as to the value of these efficiency tests, and I wonder what has been the experience of the institutions giving attention to them.

I haven't had time to review individually all these reports—280 that were sent in a day or two before I left, but I notice that these tests put the teacher to work studying educational problems, and educational methods, and if for nothing else I think they are worth while. These mental efficiency tests and psychological surveys, are helpful, and if I were a teacher I am sure they would help me with my work, help me in keeping up to date. I don't agree with the old adage that old dogs can't learn new tricks. I have been studying new tricks. I believe the questions that were brought out have helped me, and I believe in keeping up on these professional questions.

Doctor HALL. We will now pass to the next paper on the program, which is entitled, "The Influence of Boy Scout Work and Military Training on Character," by Superintendent Ignatius Bjorlee, of the Maryland school.

Mr. JONES, of Ohio. While he is coming to the stage, as chairman of the resolutions committee, I am turning the resolutions over to members of the committee. We have to go now—Mrs. Jones has followed me in here and keeps reminding me of the time—we have had a great time and I am sorry we can't stay with you till the end.

Mr. BJORLEE. The subject assigned to me was that of military training and boy scout work as applied to schools for the deaf, more especially with regard to character building. As we heard in the very splendid opening address at this convention, all mental and educational features lead to character building, and it seems to be a very difficult thing to classify boy scout work when reducing it to character building.

INFLUENCE OF BOY SCOUT WORK AND MILITARY TRAINING ON CHARACTER.

By Supt. IGNATIUS BJORLEE, Maryland School.

The subject of military training has been brought up for discussion at each succeeding convention for a number of years. Hence, it becomes exceedingly difficult to present new arguments in its support. Boy Scout training on the other hand appears to be receiving more universal favor without having been given the publicity granted to military training. On the theory that every feature of education has a direct bearing on character building, I wish to give the broadest latitude to the subject assigned me and would especially invite your attention to such figures and statistics as have been secured through questionnaires sent out by me to all superintendents of State institutions in the United States and Canada.

These 62 questionnaires covering every State institution, as designated in the Annals, have brought to me a composite opinion with reference to military training and Boy Scout work as it exists at the present time. Such an opinion should hold the strongest argument that can be advanced either for or against the further establishing of either of these two features of our work.

Of the total number of State schools 18 have at one time had military training, of which number 6 have discontinued the work for the following reasons: Difficulty in procuring uniforms (2), instructors without qualifications for good leadership (2). "Results did not warrant time and expenditures." "Discontinued on account of the war, probably to be resumed in the near future." Three superintendents registered their opposition to military training without having had previous experience; they may be quoted as follows: "In theory, I am opposed." "Personally, I am not a military man, so do not think it would work under me." "I am not enthusiastic over military training for any one. My voice is still for peace." Of the 12 institutions that still retain military training, practically all have declared such training beneficial for the following reason: Decided aid to promptness and obedience. Develops alertness of mind and smartness of carriage. General appearance is improved. Physical development

marked. Executive ability and self-reliance especially among the officers can not fail to be noted. Several superintendents mentioned the fact that military training is far more beneficial to deaf than to hearing lads. One superintendent states, "Military training wrought improvement in discipline to a revolutionary degree." Of the superintendents in 44 schools where military training has never been employed, 16 expressed themselves strongly in favor of establishing such an organization, providing suitable arrangements could be made. Twenty-three express no opinion, while 5 were opposed.

Reasons why organizations have as yet not been perfected in some of the schools follow: Limited number of pupils. Inability to secure competent instructors. Recency of assuming charge of schools. Doubt as to ability to finance uniforms.

A summary of the consensus of opinion concerning military training is as follows: Favorable, 31; unreported, 23; opposed, 8.

My experience with military training is somewhat unique in that I had an opportunity to study such training for the deaf at close range for eight years, without being in any sense responsible for its success. I have heard the system severely criticized or roundly applauded, and at the same time could see for myself the effects upon those with whom it was being tried. Subsequent to this experience I inaugurated such training in an institution where it had never been employed, and have watched its growth and development for a period of five years.

No paper on military training in schools for the deaf would be complete without calling attention to the New York institution which for more than a quarter of a century has had this as one of its distinctive features. Mr. Currier's slogan was to make of Fanwood, first, last, and foremost, a military school. In this he succeeded to a marked degree, and just here is the first essential for success in establishing military training. A school must be either one thing or the other; it can not be half military and half something else, nor can it be lukewarm. The head of the school and the military instructor, at least, must be endowed with the idea that behind military training there is real merit, and unless they can convey this spirit to the members of the teaching staff and to the boys themselves they are doomed to failure.

Some opponents of the system point a finger of ridicule at the uniform and the brass buttons attendant therewith. This feature is not, as might at first be supposed, a matter to be disposed of lightly. Is it not our duty as teachers to instil in the minds of the pupils a due respect for their general appearance and a pride in keeping themselves well groomed? No self-respecting boy who is receiving proper military instruction and is under the influence of a military environment will permit himself to slouch about in a careless manner, with hands in pockets, shoulders stooped, and clothing soiled, or unkempt. How familiar the above picture becomes when we consider the average boy of public-school age; habits thus formed are not easily broken. There are certain remedies and checks which can be applied much more readily when boys are uniformed. It becomes an easy matter to detect the careless boy and by comparison with his fellows point out to him his particular faults and encourage within him a spirit of rivalry, so that he will keep his uniform as neat and clean as possible. We have found in our experience that boys will take pride in their uniforms and will strive most diligently to make a good appearance for inspection. It can not be disputed that uniformity of dress makes more discernible the undesirable features to be eliminated.

Let us view the matter from the standpoint of physical training. Outdoor sports have been credited as the factors which brought about the splendid physique of the American soldiers and that military training was not entitled to the credit. Some would lead us to believe that by adopting military training all other forms of athletics are doomed to disappear from the campus. Nothing can be further from the truth. I can safely say for the Maryland school that the legitimate forms of athletic pursuits have suffered nothing as a consequence of the introduction of military training, the latter having been introduced as an addition to such sports as were formerly maintained.

It is generally conceded that walking in the open air is one of the best forms of physical exercise. In walking, however, it is better to follow the simple prescription, "Walk as if you meant it and were going somewhere." In military training the arms as well as the lower limbs receive the full benefit of the exercise. Shoulders must be thrown back, allowing for deep breathing and chest development; eyes and mind must ever be alert lest one fall a victim to the elusive whim of the officer in charge. No one can object to finger spelling or

some equivalent gesture being used on the drill grounds for the deaf when we know that at certain times signs are used by hearing troops. Hence the eye is trained to receive with accuracy and precision the numerous and rapidly spelled signals, so that they may be executed with promptness. Is it not a familiar statement to all of us that the gait of the deaf is slovenly and shuffling in nature? Does not the teacher have to ask her pupils a dozen times a day not to strike heels against the floor when walking? One superintendent states, "From the way military training teaches the boys to lift their feet it is worth the effort expended, even though nothing else be accomplished thereby."

Let us observe other mental characteristics, separate and distinct from those already enumerated, which we may expect to develop through military training. In reply to the question "Does military training aid discipline?" another superintendent replies, "Most assuredly, yes. Since military training has been established we have all noticed the big change in the discipline among the boys." Mental characteristics to be sought are cheerful obedience, spontaneous respect toward superiors, rapidity of decision, and accuracy of judgment. Surely it is highly desirable and commendable to have a boy come to the office with a business-like air, stand at attention until he is recognized, thereupon salute and state the nature of his business. If the outcome is not to his entire satisfaction, an intimation by the one being interviewed that the decision is definite and final should immediately procure at the hands of a boy well schooled in military tactics, a parting salute, indicating willingness to abide by the decision of the one whom he concedes to be beyond the scope of quibbling.

A word with reference to the organization supported under the military system, and a brief reference as to its general effect upon the behavior and deportment of the boys. This, of course, is one of the vital factors. Great care must be exercised in the selection of minor officers, such as corporals and sergeants, and especially in their advancement to higher rank, for the disciplinary effect upon the boys themselves varies directly according to the character of the leaders. A certain amount of responsibility is good for any child; and it can readily be seen that military training affords ample opportunity along this line. It is quite the usual experience to find that the ablest soldier is also the most alert and capable pupil insofar as class work is concerned. Thus, by judicious care, the mantle of responsibility can be thrown around the shoulders most capable of bearing it. We have yet to find the boy, who has risen to high rank by the merit system, who will not rapidly mend his erring ways when confronted with a threat of the removal of chevrons, which means reduction to the rank of private. The officers of a battalion have additional duties to perform, and should be rewarded by being granted certain privileges in the matter of quarters and freedom from certain irksome duties, providing they manifest sufficient balance to warrant such concessions.

An argument advanced by some is that for the smaller schools the cost of this training is out of proportion to the benefits to be derived. In our school there are but 75 boys, of which number nearly 35 are too small to become members of the battalion. And though of course it would facilitate matters in selecting, for instance, a provisional company, if we had twice as many, still we feel that the number we have is not a serious handicap. Three schools have discontinued military training because of the expense in its maintenance. I frankly admit my inability to agree with this objection. The parents of the boys are requested to pay for one uniform each year, and to date we have not had a single refusal by parents who could afford the expense. It is pointed out clearly that the uniform is not an addition to the wardrobe, but supplants the civilian suit, and is worn in the classrooms and on all dress occasions at the school, the boys being permitted to wear any article of civilian dress they may have available for the afternoon trades work and for the playground. In the cases of a few children for whom we were formerly required to supply a part or all of the clothing, we have of course been obliged to provide uniforms. Very often in smaller schools the boys' supervisor is the athletic instructor. With us the office of military instructor and boys' supervisor are happily combined. Hence so far as we are concerned, there is no additional expense. In five of the schools conducting military training, uniforms are provided by the parents, while in seven schools the State makes provisions.

Some have pronounced military instruction a waste of time. I confess that the time allotted to military training in some of the schools, especially so in days gone by, was excessive; but it was then the impression that this was necessary in order to maintain a satisfactory organization. Before assuming the responsibility of introducing the system in a new school, I had made up

my mind to economize so far as possible in the matter of time consumed. Our boys' daily drill period is from 10 to 10.30 a. m., which constitutes our recess time. Weather conditions permitting, this drill is held out of doors; when such conditions are unfavorable, Butts' Rifle Drill or Manual of Arms is practiced indoors. Hence every boy is given the full benefit of the morning's exercise. If the half hour were left to the fancy of the pupils, a few would be indulging in strenuous games, while the majority would be lounging about as onlookers, and those who most needed exercise would probably be found in the study hall poring over some book. Without boasting about what we have attained, the briefest method of illustrating that we are using a sufficient amount of time is to recount one of our experiences. After a year and a half of training, our boys challenged to a competitive drill the winning company at the Frederick Boys' High School, an organization of 400 cadets who have had military training for a number of years. Our company came out victorious by the unanimous vote of three Regular Army officers, acting as judges. Visitors state a favorable comparison between the drilling of our boys and the Naval Academy cadets.

The parade feature of military training is entitled to a word in passing. Our boys have every evening parades every Sunday on the front lawn and these attract the attention of numerous spectators. We have been asked to participate in all of the city parades and were recently invited to head a procession of 2,000 men, our drum corps being asked to play despite the fact that there were four bands in the line of march. I am a firm believer in advertising the accomplishments of our deaf children. A well-known deaf man once wrote that his greatest hardship was not the fact of his being deaf, but the difficulty of making the hearing public appreciate what the deaf can do. Here military training can be made to work marvels if properly conducted. Solely due to the fact that our boys form a military organization and appear in uniform, we have for three consecutive years been invited to Baltimore to participate in a monster Boys' Week Demonstration. Free transportation facilities were afforded, by the Baltimore Rotary Club, and numerous reports expressing pleasure and surprise at the accomplishments of the boys have been received.

It may not be amiss to add a word with reference to a drum and fife corps, such as can be secured from the student body of any of our schools; far from giving a misconception as to the condition of the deaf, a drum corps should enlighten the public as to a realization of the fact that a number of the children in our schools have a remnant of hearing. This being the case, it is a matter of negligence where such hearing is not utilized. To me it is evident that drum-corps work does aid in the restoration of hearing, in so far as it teaches concentration and, through exercise, strengthens the organs of hearing. By the above statement I do not wish to convey the impression that totally deaf children have not been taught to master the use of musical instruments. After all, the beating of drums is merely mathematical precision. In a school, for instance the size of ours, only a very limited number of boys can be spared from the battalion to form the drum corps; hence we feel justified in selecting such material as will most readily become proficient in the art and at the same time derive the greatest benefit therefrom.

Do the deaf themselves approve of military training? In the main I would say that they do. But you will find objectors in the ranks of every line of endeavor, and it is always true that the chronic complainer will be heard above the applause of a score or more of satisfied participants. If you were to ask any group of teachers whether or not they would agree that a brisk 2-mile walk in the open air before breakfast was beneficial and health-giving, I doubt that there would be one dissenting vote. And yet if you were in a position to enforce such a rule, after the vote had been taken, I am sure there would be a great deal of complaint after the first two or three mornings. If then among a group of teachers there are those who would object to doing that which they admit is beneficial, may we not expect to hear some complaints from boys? The unanimous verdict of the adult deaf of Maryland is a feeling of pride in the accomplishments of the deaf cadets and a feeling of regret that such training was not available for them.

Do the deaf themselves approve of military training? I would say with us most emphatically they do, but so much depends upon the military instructor, the superintendent, and also on the teaching staff. We had some difficulty the first and the second year with our boys. It was an innovation and some of the teachers did not see the benefit of it. They rather felt that the noise of the drums proved a disturbing element and were rather opposed to this military and

drum-corps organization coming into a school for the deaf, where things had been perfectly quiet theretofore. The boys immediately noted this and some of them rallied around the objecting teachers, or those least enthusiastic, with the result that for a time conditions were strained to a certain extent, but after the first year and a half that matter was disposed of very summarily, and since that time there has not been one child, so far as I know, who has opposed military training, and I have never heard one word from any parent stating that the children complain at home about military training.

BOY SCOUTS.

It may not be amiss at the very beginning to affirm that Boy Scout work should in no sense be considered as a substitute for military training. Both have their distinctive functions to perform. The former can strictly be conducted only for boys between the ages of 12 and 16; while the latter may be begun shortly after a boy enters school and continued throughout his school career. When properly managed it is unnecessary for either of these features to encroach upon the allotted time assigned for athletic sports.

In a general way we are all familiar with the term "Boy Scouts"; but I am afraid that with too many of us a very superficial impression is all that has been made. We think of a Boy Scout as a lad dressed in khaki, taking hikes along cool, shady lanes; and probably feel that if he has been taught the art of making a fire by friction, he has attained to the highest goal in scoutism. Nothing can be further from the truth. The 62 questionnaires mentioned under military training as having been submitted to as many superintendents of schools for the deaf, were returned without a single adverse criticism which could be credited as anything, save the expression of doubt as to the value of such training.

One superintendent did state that he could see no particular advantage to his boys as a result of their Boy Scout training. Another stated that Boy Scouts, both hearing and deaf, had fallen far short of what it had been expected that the movement would make of them. A third stated that his boys did not need it.

Of the 62 State institutions, 19 now have one or more active Boy Scout troops. Five schools have discontinued the training; one because of a lack of time, and four because of the fact that they could not secure the services of competent scout masters. Twenty-seven superintendents, who do not now have Boy Scout troops, favor the movement. Fifteen voiced no opinion, while three raised faint objections, as above mentioned. To summarize: Forty-four superintendents express themselves favorably. Fifteen make no statement, while three raise faint objections.

Among the chief factors mentioned by superintendents as the results of Boy Scout training, I would briefly state the following: It brings the deaf and the hearing boys together on a common ground of equality, such as can be gained in no other way. Much useful information can be derived through this medium. High ideals are instilled in the minds of the scouts. Self-reliance is developed. It is a distinct aid to language building and classroom work.

Various superintendents may be quoted as follows:

"The Boy Scout movement has been a benefit to the entire school. Best thing devised."

"It opens up the great out of doors to an institution boy."

"Boy Scout work tends to make of deaf lads real wide-awake Americans."

"I believe the Boy Scout work to be of inestimable value to the deaf."

"Certainly everything taught in scouting is cultural."

You might rightly ask why, with such a preponderance of superintendents favoring the Boy Scout movement, that there should be so many who still have no organized troops. The reason lies in the lack of efficient scout masters. As previously mentioned, four of the five schools in which the work was discontinued were compelled to do so because of lack of competent leadership: Perhaps in no other field of enterprise, save military training, does so much depend upon the capability of the one in charge.

Ten of the 18 scout masters in the various schools are deaf men. At Frederick our military instructor, a deaf man, is taking up the Boy Scout work, and that in a very acceptable manner. He appears to be the right man in the right place; being able to make himself understood perfectly in speech, though not particularly adept at lipreading, he is able to communicate freely with the hearing. He takes as much interest in the Boy Scout work as do the boys under him. By diligent application and close contact with the city organization, he is keeping well

ahead of the boys, and will have mastered all qualifications of an Eagle Scout before any of the boys attain to that distinction.

Just here it seems to me is a splendid opportunity for competent young deaf men to become actively affiliated with the work of our schools.

Permit me to summarize briefly what in my judgment constitutes the Boy Scout movement. President Harding recently made the following statement:

"I am keenly anxious to do all in my power to extend the influence of the scout program, because America must avail itself of every resource for producing that type of American citizenship which will not be content with acceptance of privileges of citizenship without active participation in meeting the responsibilities of citizenship. In the Boy Scout movement, you not only place emphasis upon service, but you have worked out your program in such a way that boys actually learn by doing, and in a natural manner acquire that attitude of mind which brings to them a conscientiousness that they must be citizens of the participating kind, and not mere onlookers."

What does the name Boy Scouts of America imply? It is an organization incorporated June 15, 1916, by the Government of the United States, through a special act of the House of Representatives and the Senate. One short paragraph from this act of incorporation reads as follows:

"Sec. 3. That the purpose of this incorporation shall be to promote, through organization, and cooperation with other agencies, the ability of boys to do things for themselves and others, to train them in scout craft, and to teach them patriotism, courage, self-reliance, and kindred virtues, using the methods which are now in common use by Boy Scouts."

With the above definition of the organization in mind, and the President's hearty indorsement before us, let us determine just what a Boy Scout is. A Boy Scout is first and foremost a real boy. A full-fledged, red-blooded American boy. He loves the out-of-door life, preferring to commune with nature rather than with things artificial. He can endure a long hike, he knows the directions and can locate them either by night or by day. He can climb a tree which most boys would not dare to tackle; can swim a stream, hold his own in athletic contests, or do any one of a hundred things which tend toward making a boy self-reliant and brave in the face of danger.

He knows the woods; he is a friend of the birds, beasts, and fishes, having observed their habits and studied them in their native haunts. He can track an animal or an automobile; has studied relations existing between cause and effect. He has become alert and wide awake.

He has learned the lessons which come to those who know; he does not bully, browbeat, or try to win a point by oaths and loud talking, with an effort to confuse his hearers. He is modest.

He can pitch a tent, sew on a button, or mend a garment, build a fire out of doors on a wet, rainy day, and cook a meal. He is useful.

He has learned to respect the rights of others; even the dumb animals find in him an understanding, sympathetic friend. He is kind.

He knows that others expect more of him because of the fact that he is a scout, and because he is wearing one or more badges of honor. Hence through assuming responsibilities he becomes reliable.

He knows how to administer first aid in cases of near drowning or accident. He can stop the flow of blood from a wound, knowing the difference between the flow from an artery or a vein. At times of extreme danger his training should make him cool and collected. He is then indispensable.

He knows the government of his city, State, and Nation. He holds a high regard for the flag and knows how to show it due respect. He is patriotic.

In accordance with the motto on his emblem he holds himself physically, mentally, and morally fit, so that when the times comes for serving his fellowmen, his country, or his God, he is prepared.

In all of our dealings with boys we must bear in mind the existence of a strong gang spirit which prevails to so marked a degree within the heart of every boy. This is not an undesirable trait, but a most worthy one, requiring, however, that it be guided into proper channels. A boy is as willing to follow a natural leader as he is anxious to be a leader, but the leader must, in the estimation of the boy, merit the position. Let our gang be a Boy Scout troop, it will then be democratic to the last degree, the uniform alone in a large measure making it so. Furthermore, it will be nonreligious and nonpartisan. Each boy should be urged to purchase his own uniform and be required to earn sufficient money with which to pay his regular dues. The "big brother," whether individual or an organization sponsoring a troop, must not do too much for the boy along

these lines, for thereby self-reliance would suffer; nor should prizes or medals be given without due effort exerted on the part of the boy to merit same. Boy Scouts have nothing in common with the "get something for nothing" element.

Solely through diligent efforts does a Boy Scout attain the highest degree. Very little is expected of a boy before he can begin the upward climb. He must be 12 years of age before he can take up the activities of the "tenderfoot" stage. A suitable test must then be passed, covering the activities of a period of at least 30 days. This test covers ten more or less rigid requirements, which if successfully passed entitle the boy to the degree of second-class scout. He must remain a second-class scout for at least 60 days before he can qualify as a first-class scout, and I feel that you should in a general way know what constitutes the requirements of a first-class scout:

He must be able to swim 50 yards.

Have earned and deposited a certain sum of money in a local bank.

Be able to send and receive messages by various codes.

Have a hike of at least 14 miles and presented a successful report on same.

Must be versed in a general knowledge of first aid.

Be able to prepare and serve a meal.

Draw and read field maps.

Know how to handle an ax in felling trees.

Be a judge of distance, size, height, and weight to within 25 per cent of the correct amount.

Give evidence that the scout oath has been practiced in daily life.

And enlist a boy trained by himself into the requirements of a "tenderfoot."

Having satisfactorily passed the examinations as to his qualifications for a first-class scout, a boy becomes eligible to the degree Eagle Scout, providing he can qualify and receive 21 merit badges. These badges are 61 in number, and I would enumerate a few to show the wide scope covered, which enables the country boy and the working boy to compete on an equal footing with the city school boy:

Aviation, photography, bird study, astronomy, botany, forestry, business, plumbing, music, beekeeping, dairying, poultry raising.

This should not convey to you the impression that receiving a badge declares a boy competent to make his living in any one of these branches; that, of course, would be ridiculous in view of the fact that the boy must qualify for 20 such badges. It does, however, mean that a boy has a general working knowledge of the different classifications, and that it has required careful and painstaking study to master such information as he has obtained.

I have already consumed my allotted time. In conclusion permit me to leave with you one thought, namely, the value of early influences and the tremendous importance the recollection of such training plays. At a critical time it may be the making or marring of a boy's entire future.

It is my conviction that the Boy Scout movement surrounds our boys with clean, wholesome influences, which make them "look forward, not backward; look upward, not downward; keep smiling."

In the above paper I have endeavored to summarize opinions concerning military training and Boy Scout work as they pertain to schools for the deaf. It can not be disputed that the verdict of the profession is favorable toward both features. If in your judgment these organizations do materially aid in the molding of character, are they not worthy of your earnest thought and moral support?

Doctor HALL. We will limit the discussion of the paper to five minutes. Are there any who wish to ask Mr. Bjorlee any questions?

Doctor LA CROSSE, Wright Oral School. I was very glad to hear Mr. Bjorlee say that his band is composed of hard-of-hearing boys. Mr. Bjorlee's eight-year experience in a school where military training is encouraged having a very large band, backed up by his own school having a band, puts him in a position of knowing whether it is worth while: First, whether it is possible to teach a totally deaf boy to play the slide trombone or the cornet. Secondly, if it is possible, whether it is worth while.

I would like to hear from the schools that have bands, whether they are not largely composed of pupils with some degree of hearing, because to the world the impression goes out generally that these bands are composed of boys that are totally deaf, and we are held

up more or less to the ridicule of men who say that it is impossible to teach totally deaf boys to play such instruments; and if it is not impossible, then it is impractical to take that amount of time which is necessary to teach a totally deaf boy to play such an instrument.

Doctor HALL. Is there anyone here from the Tennessee school? I believe they are trying the experiment with a band.

Doctor TATE of Minnesota. We have a band in the Minnesota school, and it is pronounced really a very good band.

Doctor HALL. Will you answer the question that Doctor La Crosse asks, as to whether the members of that band all have some hearing?

Doctor TATE. Most of them have some hearing. Some have none at all, I think.

Doctor HALL. What do they do, beat the bass drum?

Doctor TATE. They hammer the drum to beat the band.

Now while I am on my feet I want to say something about the benefit that has come to us from the band. In the first place it is a matter of great pleasure to the school, to the whole school. I do not except anybody. The deaf say positively they can feel the vibrations in front of this band, or the band passing by them. They feel the vibrations when marching by music to the dining room and out, and I think practically every child in that school gets some exhilaration and pleasure out of the vibrations produced by this band.

I believe that in this matter of sense training, this matter of the use of the piano and other instruments, there is a general good. I believe the children not only get pleasure from it, but I believe they get vibrations that affect the tonal quality and are important in their speech work. I believe they get great benefit from that band by the vibrations, which are helpful to them in modulating their voices.

We have a band of, I think, eight instruments, bass and snare drum. It makes the children feel that they normally do things other people do, and it gives a good impression to the people who pass along and see the band. I think anything that a school can do to make its pupils feel that they are normal children, just like other people, is a very good influence.

Doctor La CROSSE. Mr. Chairman, I believe that all Doctor Tate says is absolutely true. For five years I listened to the same band that Mr. Bjorlee did, and I know the benefit that comes from it, and I know all the benefits Doctor Tate has enumerated are true; but what we would like to know is whether the majority of the pupils playing the wind instruments in that band do not have a great deal of hearing. If they do not have a great deal of hearing, if you do have a totally deaf child who has succeeded in playing a wind instrument, has he achieved that success at the expense of something else, has the time that has been given to it been worth while?

Doctor HALL. I think, as Doctor Tate expressed it, most all of those pupils have a considerable amount of hearing.

Doctor TATE. Usually they have some hearing.

Doctor La CROSSE. You say all of them have who play wind instruments, Doctor Tate?

Doctor TATE. I think we have one or two totally deaf, but they are playing the drums.

Doctor HALL. I think we shall have to proceed with the program.

Mr. GOODWIN. Ever since I have been with the deaf it has been my observation that for the moral effect it is a splendid thing for the

deaf child to attempt anything his hearing brother can do except to hear. I believe when we put them as nearly as possible on a level with the hearing brother in anything, it is helpful morally; it helps in an educational way. I have not yet decided that I would have a band in my school if I could.

I was glad to hear Doctor Tate say what he did about the school band. I have been under the impression that practically everyone in a band, whether he beat the bass drum or blew the cornet, was a semimute, as we usually call them—at least had some hearing. I made a little survey of our classes with Mr. Birck when he was with me, and we could not find, in my estimation, a group with enough hearing to go into a band, hence I didn't encourage it.

This is so close to the military work that perhaps it would not be amiss to say that I do approve very heartily anything that helps the military feature as a training. When I first took up the matter of organizing a military company I wrote to the War Department and told it very clearly that we were not training soldiers; that was not the object, but purely as a matter of discipline for citizenship that we wanted this training in schools for the deaf. I very heartily approve military training, but as yet we have not organized our band and I am not planning to have one.

Doctor HALL. Mr. Betts, will you take a couple of minutes to give us your opinion of boy scout work?

Mr. O. A. BETTS. Mr. Bjorlee covered the subject very fully in his paper, and the only criticism I would make is that he should have transposed the subject matter of his paper and given boy scout work the first place. However, I think he has covered the subject very thoroughly in his summary. We have scouting in our institution and regard it very favorably, and there is nothing more that I could add to that.

We have tried to follow the idea of making our pupils do things in as nearly a normal way as possible with normal hearing children, and I know of nothing that is better than scouting. There is no supplementary work that is better for training a deaf boy, or any boy, for citizenship or for discipline. The fact is, when the boy comes into our school life we do not call him a deaf boy at all and so he enters into all the activities of scout work and holds his own with the hearing boys. I know of nothing that affords greater inspiration to the deaf boy to work with the hearing boy than scouting. We carry out this idea both with the boys and the girls in Y. M. C. A. and women's club work. They have their separate times to go into the gymnasium physical culture work. It was only a few days ago that we won complimentary honors for such work in the woman's club.

Successful scouting depends entirely upon two things:

First, you must have the right kind of a scout master. If you haven't a scout master that is interested in the work and wants to encourage scouting in the school, it is useless to undertake it, and it is useless for him to undertake it unless he is going to have the cooperation of every officer and teacher in the school.

Doctor ROGERS, of Kentucky. I would like to suggest that the time is very limited. While we would like to extend to these people the courtesy of hearing them, we ought to postpone all further discussion until after these three papers are read; then if we have time we will discuss them.

Doctor HALL. I will call on Doctor Long, who is next on the program, for his paper on character building.

CHARACTER BUILDING.

By Dr. J. SCHUYLER LONG, Iowa School.

After six years in the public schools I entered the school for the deaf at Council Bluffs at the age of 12 years. I found myself in a situation radically different from the life I had been living. In a way, I felt more freedom and less restraint in the matter of conduct. Mother's reproving glance was 300 miles away and did not follow me like a nightmare and watch my behavior from over my shoulder. Father's strap did not hang in plain view to warn me to be good or take the consequences.

I decided I would have a good time. But I soon found myself surrounded by people who interfered with my freedom and kept giving me a list of "Don'ts" that sounded very much like those I had been used to at home. The situation was different but the restraint was there and in the administration of justice I sometimes thought it was not tempered with the same mercy I might have received from father and mother.

Once when I dared to defy the established code of school ethics it was not long before I had a letter from father sternly admonishing me to deport myself with a little more regard for the rules of the school. In some mysterious way he had been informed of my misdeed. The strap came into view again and I treated the warnings I received with a little more respect.

Among my new companions I soon began to discover certain characteristic differences between them and those I had associated with the first 12 years of my life. For one thing I noticed a singular lack of swearing. I would not have you think, however, that I was accustomed to using this kind of language—I was a very exemplary Sunday-school boy. But I used, sometimes to envy the ease with which some of my former companions punctuated their remarks with fervid and emphatic expressions. Being aware that mother's ears were far away, I thought I would have a good opportunity to practice a little and acquire the art. I found my companions wholly unappreciative of my efforts. I expected applause but met with only innocent looks. It was wasted effort. I wondered if they were better than other boys. Later I thought it might be that the sign language was not adapted to the use of profanity.

As to the first proposition I soon found out my mistake. They could lie with as much fluency as any of my old friends and I no longer left my money in an unlocked trunk. Certainly deafness in itself had nothing to do with ability to go wrong. As to the second I have found out—by seeing others use it, of course—that the sign language does not lack in such expressiveness even if it is limited in vocabulary.

The moral of this account of my personal experience is evident and, besides showing other things, brings me to two important phases of the subject which I am to discuss—character building.

In the first place our boys and girls are placed among surroundings wholly different from those of the child at home. And they have not, through the ear, learned some things that would instill evil influences, and to a degree we might say they are innocent through ignorance.

This different situation by its existence and nature puts on us, who have the care of these children, a greater responsibility than is assumed by teachers in the public schools. This responsibility can neither be denied nor shifted.

Another phase which follows the first condition and complicates the problem is that we have a very mixed family—children from different families and very different moral bringing up. These children are put into closer relation with one another than are the children in the public schools and in the social life at home. This situation emphasizes the responsibility.

In the course of their daily lives, from the time they get up until they are safely tucked into bed they are brought into close contact with different people concerned in their physical and educational care. Instead of two parents, there are a dozen guardians. Each one of these individuals exerts a direct influence upon the molding of the child's character—some more and some less. But none may escape the responsibility.

We are required not only to educate these children, train them in industrial pursuits, and look after their physical welfare, but we must build their characters and educate their moral natures.

Aside from the personal influence exerted by all those having to do with the instruction and the care of the children, which is patent enough, we provide certain features of school work for this purpose, namely, the Sunday school, the Sunday lecture, and the religious society. The methods in these are pretty well established.

There are some who doubt the value of the Sunday afternoon chapel service. My own feeling is that when the services are made responsive so that the pupils are led to take a part in them, and the lecture part of it is brief and never tiresome, much good comes of it and I would be very slow to discontinue it unless something better were provided as a substitute.

In the Sunday school I have not found the International Sunday School Lessons as satisfactory as a graded system of Bible study—something like that provided by the Chicago University Press.

The influence of the Christian Endeavor and similar organizations is very great. But by far the greatest influence on the formation of character is exerted by the teachers, those who have direct care of the child and his companions.

In the school room the teacher is expected to instill moral principles by precept. But neither his influence nor responsibility ends there. He is looked up to as an example. His life outside of the schoolroom is a matter of close observation, and the subject of much conversation among pupils with its consequent influence. There are many teachers who mix with the pupils after school and who do great good (or great evil) by their personal association.

When the pupil leaves the schoolroom the direct responsibility passes to others. Of these the most intimately associated with the pupil is the supervisor. He is with the pupil during his hours of relaxation; when he is hungry and cross and when he is in a mood to let the worse sides of his nature show themselves. He is with them in the dormitories and buildings and at all times when not only their bodies but their natures are bare.

Do we give sufficient thought to this influence of the supervisor? To the power he may exert for evil or for good? Do we select the supervisor with the same scrutiny into his moral character as we do into that of the teacher? Perhaps we do and perhaps not, but we most certainly should.

Two factors enter into the formation of character—heredity and environment. It is a matter of debate among students and observers as to which of these exerts the greater influence. My own observation inclines me to think that it is environment. The latter may not always wholly overcome total depravity, but it will rarely at least fail to hold the hereditary tendency in check and I have had many proofs that a child who from family history might be expected to just naturally be wicked, like Topsy, has been placed permanently in the straight and narrow path.

If we do find one too far gone to redeem or one who has too strongly inherited the disposition to evil, get rid of him. His influence on the others is too great a hindrance to securing good discipline. It is better that he be put away than that the other 200 children should receive the evil effect of his influence.

The whole question, to my mind, lies in the matter of environment. A good moral character should be one of the first qualifications not only of a teacher, but of every employee in the school. Surround the child with the right kind of atmosphere and his character will build itself.

I realize I have spoken only of moral character. The whole subject of character building is too broad to consider in all its details within the limits of one paper. It is only in the matter of building moral character that we find the case of the deaf child somewhat different from that of the hearing child and gives us matter for discussion.

Doctor HALL. In accordance with the suggestion of Doctor Rogers we will pass to the next paper on the program, "A health program for the school for the deaf," by Dr. Harris Taylor.

A HEALTH PROGRAM FOR THE SCHOOL FOR THE DEAF.

By Dr. HARRIS TAYLOR, Institute for Improved Instruction.

Mr. President, ladies and gentlemen, the Lexington Avenue School for the Deaf offers the greatest opportunity for the acquisition and diffusion of diseases of any school for the deaf in the world. I should not say that the great majority of our pupils live in the Ghetto or the slums, but without question we have the highest percentage of children from congested districts of any residential school in the world. Add to that the fact that each child may go home on Saturday or

Sunday and bring back with him all that he may acquire while he is at home, and you realize some of the difficulties with which we are confronted.

Against that we are the most scrutinized, the most thoroughly examined of any school in the country. No neighbor's garden was ever more thoroughly examined by a brood of hens than our school is by the various public authorities.

It is the duty of the State department of education to give us at least two examinations a year, and these two examinations take up about six days. Among other things they expect us to examine into the physical conditions that look toward the physical welfare of the children.

The State board of charities makes at least two examinations a year into the physical condition of the premises and how they will affect the bodily interest of the children.

The city board of health makes three examinations a year of every child, classifying them according to the disease they are expected to have or the conditions they are expected to be in. The board of health inspectors apparently found a horde of diseases, terrible ones, by putting down a list that they called pulmonary; and the trustees wanted to know what in the world was the matter with the institution's physician that such a large number of children had consumption. There was a list this long [indicating] of cardiac and a number that were anemic—malnutrition. It was a terrible thing. But when it was investigated we learned that the new régime didn't say that these children had these various diseases; they only said that, "Our cursory examination indicates that we suspect that that child has heart trouble. We would like to have a thorough examination as to whether or not the child has any pulmonary trouble," etc.

In other words, they make an examination, designate the children that are suspected of this or that or the other condition. Then, monthly, the board of health makes an examination of the premises, making a particular examination of the hospital, the dormitories, the places where the food is stored, the kitchens and the dining room. So much for that.

Then when it comes to the children, when a child makes application for admission we send a field worker to the home to examine the home conditions. The child upon reception into the institution, before he has an opportunity to come in contact with other children is segregated until he can be examined by the attending physician. Then at the earliest practicable moment he is examined by the ophthalmologist—I have to pause for that word—and the aurist, and as soon as possible by the dentist.

If from any of these examinations there develops the necessity for further examination, he is sent to the dermatologist, the neurologist and the orthopedic specialist. He gets through with all those within the first three months that he is in school. Then if there is anything left of the child upon which we can operate, he is examined by the physical director, who takes measurements of height and weight and chest capacity.

These examinations of weight and height and so on are made—well, the weights are made monthly and the chest and height measurements are made semiannually. Then if the child does not make a satisfactory gain the results are tabulated and sent to the attending physician. If any child falls off in a month as much as two pounds he is examined and is marked for reexamination with particular stress next month. Then if next month there is still a falling off, he is given a most careful examination and possibly put on a special diet.

The results of these examinations of height and weight according to age are tabulated and compared with those of hearing children.

Dr. L. B. Bernstein, who was formerly at the head of the Hebrew Sheltering and Guarding Society at Pleasantville, N. Y., and later was statistician to 91 institutions in New York, made a number of investigations which resulted in the conclusive proof that institutional inmates, children, are below the normal in weight as compared to height—in weight and height as compared to hearing children—I mean to children who live in home environments. This is very interesting. I tabulated the results for a period of five years and found out that the same condition existed in our own institution. We were slightly below the average of the accepted weight of children in general.

We had a meeting of the medical board of the institution to discuss the question of the dietary of the children, and then in one year's time we raised the average so much that we now find that the children are above the average.

In January I retabulated for the year. When I began these tables I assumed that institutions were below normal, as is generally supposed, and it has been found from my own examination. On comparison, however, I found in January a difference. Taking up 136 cases of boys, 46, or 34 per cent, were below the

normal weight; 10, or 7 per cent, were of normal weight, and 59 were above normal, which placed them clearly above the average of children residing in their homes.

Of girls, 95 cases, 31 per cent were below normal; 2 per cent were normal, and 67 per cent above normal for children in general of corresponding ages and heights.

The way these are taken is one that is generally accepted, but we have found that there is more variation in the length of the leg than had been generally supposed, and a more accurate measurement of what constitutes the normal weight for age may be determined by measuring the trunk instead of the total height of the child. Accepting that, we have recently measured the children of the institution in a sitting posture, but have not been able to tabulate the results. I was working on it at the time I left home and was unable to complete the work.

The best book on that subject, if you are interested in the subject, is *The Assessment of Mental Fitness*, by George S. Dreyer, of the University of Oxford, published by Powell Hober, 67 East Fifty-ninth Street, New York City. That is the best authority on that subject. When I say that I am not going on my own opinion, but am consulting numerous officials and others who have given attention to this subject.

In that way we are keeping our basis of comparison constantly before us, and we may broadly assume that whenever a child is 10 per cent below weight, a physical examination is very desirable. And if he should run as much as 15 per cent above normal weight it is very desirable also that an examination should be made into his condition and studied very carefully for the next few months.

The question of dietary is one of exceeding difficulty. In the first place it takes on with us a religious significance, and that involves problems that none of you can understand, I think.

To begin with, we have just enough Catholics to have to adjust our Friday menus to meet their requirements, and sometimes Wednesdays, and I always have to look at a calendar that has a fish printed on such and such days through out the year.

Next we must comply with the Jewish dietary laws, and these are more complex than I was aware when I undertook to arrange menus for the children, and sometimes are very difficult to carry out.

Bearing these facts in mind, the possibilities of arranging sufficient variety to meet the conditions of the children are very great.

Then you meet with another problem, and that is, here is a food that is perfectly wholesome, very desirable, and there is only one fault to be found with it; the child will die before he will eat it. The people in India, I understand, and in China, where they have certain kinds of foods, would simply die before they could adjust themselves to a new food which is equally nutritious, and we find that children will simply nibble at a food that they don't like—that they have not been accustomed to. They can not adjust themselves to it, and the first thing you know, with the best intentions in the world to try to give a child greater variety and improve his physical condition, you may find that you have not been using quite as much of a certain food as you expected, and that the children have fallen off in weight proportionately. Those are problems that are very difficult, and in the schoolroom the teacher can do a great deal toward showing the value of these various foods and bringing about a spirit in the child that will cause him not to revolt at a food that is different from that to which he has been accustomed. And when you take some of them who look upon the pickle as one of the most nutritious articles possible, you can appreciate some of the difficulties that we have to meet.

Next in regard to the food value of food products, the best book I have been able to find is McCollum's *The Newer Knowledge of Nutrition*. Mr. McCollum is professor of chemical hygiene in Johns Hopkins University. I think we may safely say that in the view of the Rockefeller Institute for Medical Research there is no book that stands higher on the subject than this.

Now we come to the daily program. It is highly desirable that the school should be arranged like this, with large, commodious schoolrooms, ample ventilation, ideal lights and all, but some of us have to take what we have.

Then we have to study how long children can work at certain things before they become unduly tired, and we must change and give them a little diversity in posture and in work. Every hour our children go through some light gymnastic exercises, part of which have been recommended by the orthopedic con-

sultant, and these give a little relaxation. There is nothing new or difficult with us when it comes to the gymnasium work and the out-of-door activities. We make the best of these that we can; therefore I am confining my remarks to the conditions that I have mentioned.

The physical condition of the child is based so much upon the question of nutrition and the quality of food that they receive, and its proper quality as adapted to that child, that I am convinced we have not given this subject adequate attention. It seems that when a child may be proportionate in weight or height he may be under height. A child may seem to be very strong, relatively speaking, no sickness, no appearance of being anemic, and yet be stunted by lack of adequate food, and if you will go into those parts of our large cities where the children have the fewest opportunities to get the right kind of food, you will find the most stunted people there are in those large cities, showing that it stunts the growth as well as makes them thin in proportion to their height.

There is another point that I have learned from consulting with physicians and those who have given this subject some study, that proper feeding will bring up a child who is stunted remarkably, and he takes on growth in height—that is, provided he has not already reached the age of 17 or 18 before you begin to "feed him up," as the expression is.

There is one other phase of the subject that I wish to speak of, and that is one in which there has perhaps been more divergence of opinion and less satisfactory results than anything else. I am speaking on the acquisition of bad habits during the period of adolescence of boys, and how these can be met and how the children can be best handled. I have tried to think on this subject as others have through a great many years. There was a time years ago when I knew exactly what to do. I don't now, but I am convinced that general talks to all the boys are not advantageous, and I feel sure that whatever is said should always be to the individual in private.

Doctor HALL. I would like to announce the committee appointed by the American association to consider the advisability of closer cooperation or union with the Convention of American Instructors of the Deaf and the conference of principals and progressive oral advocates has been announced by Doctor Crouter and Doctor Taylor—Doctor Crouter was appointed chairman—and the others of the committee are Dr. Caroline Yale, Mr. J. W. Jones, Mr. Frank Driggs, and Mr. Percival Hall.

The last number on our program is not to be a paper, I understand, but a demonstration by Mr. Thompson, of the New Jersey school, who will show us the value of machines for projecting pictures upon the screen and their value in the education of the deaf.

Mr. Thompson, if you will excuse me a moment, Mr. Driggs would like to propose a list of honorary members. He is to take the train shortly and I will ask him to read that now.

Mr. FRANK DRIGGS. Mr. President, members of the convention, it gives me pleasure to propose the following as honorary members:

HONORARY MEMBERS.

Anderson, Miss Matilda W., Glasgow, Scotland.

Baker, Miss D. E., Birmingham, England.

Bateman, Mrs. George, Halifax, Nova Scotia.

Bawden, Miss Kate, Belleville, Ontario.

Bjorlee, Mrs. Ignatius, Frederick, Md.

Collister, T. W., Belleville, Ontario.

Colquhoun, A. H. W., Toronto, Ontario.

Croghan, Miss Amy, London, England.

Dobyns, Mrs. J. R., Little Rock, Ark.

Driggs, Mrs. Burton W., Devils Lake, N. Dak.

Falconer, Sir Robert, Toronto, Ontario.

Forrester, Mrs. T. C., Rochester, N. Y.

Gemmell, W. H., Des Moines, Iowa.

Gilmour, E., Montreal, Quebec.

Henderson, Miss Barbara, Birmingham, England.

Herety, J. O., Belleville, Ontario.
 Houston, Dr. J. A., Toronto, Ontario.
 Johnson, Mrs. J. L., Trenton, N. J.
 Jones, Mrs. J. W., Columbus, Ohio.
 Kawamoto, U., Japan.
 LaCrosse, Mrs. E. L., New York, N. Y.
 Love, Dr. James Kerr, Glasgow, Scotland.
 Manning, Mrs. F. H., Talladega, Ala.
 Myers, Miss Sarah A., Boston Spa, England.
 Pearce, Miss Elizabeth, Belleville, Ontario.
 Pearce, J. W., Belleville, Ontario.
 Pittenger, Mrs. O. M., Indianapolis, Ind.
 Ponton, Col. W. N., Belleville, Ontario.
 Poore, H. T., Knoxville, Tenn.
 Robertson, McKenzie, Belleville, Ontario.
 Rodwell, Mrs. Thomas, Winnipeg, Manitoba.
 Scott, Oswald, Belleville, Ontario.
 Shackley, Mrs. Myrtle, Baltimore, Md.
 Smith, H. B., Washington, D. C.
 Smith, Mrs. H. B., Washington, D. C.
 Walker, Mrs. A. H., St. Augustine, Fla.
 Willoughby, Miss E. A., Belleville, Ontario.
 Wilson, Father E., Boston Spa, England.

I don't know that the committee has neglected anyone, but if it has, we would be glad to add any names.

Dr. J. SCHUYLER LONG. If I have made an error in placing some of those wives on the honorary list instead of on the active list, I would like to be corrected. The constitution provides that all those actively engaged in the work of teaching may become active members, and it is the usual rule that wives who are not actively engaged in the work be placed on the honorary list. Perhaps I have made an error, and if I have, I would be only too glad to be corrected.

Mr. E. McK. GOODWIN. Did I hear Mr. Haycock's name mentioned?

Mr. DRIGGS. He is an active member.

Mr. GOODWIN. A member of the American institution?

Mr. DRIGGS. He is a member of the convention.

Doctor HALL. The constitution says that anyone actively engaged in the teaching of the deaf may be a member. It doesn't say he must live in this country. We are very glad to have Mr. Haycock an active member of our organization.

The committee has made its report, what is your pleasure?

Mr. DRIGGS. I move you, Mr. President, that this report be adopted and that these people be named honorary members of the convention.

(The motion was seconded, put, and carried.)

Doctor HALL. The motion is carried unanimously.

We have now come to the demonstration by Mr. Thompson. We would like to conclude in about half an hour.

Mr. H. E. THOMPSON, New Jersey School. There is so much cross-light in here that probably results will not be very good this morning.

I have prepared two reels of films to present in lieu of a paper, but as time is so short I will just project one of those reels.

The aim in presenting these machines is to show you what films and machines are available. The first reel is made up of some choice bits of four or five reels which have been sent me from advertising companies at no expense save transportation.

(Mr. Thompson showed some moving pictures.)

Mr. THOMPSON. With this projector you can stop the film at any place, and in the ordinary schoolroom the screen image is very much clearer.

Doctor HALL. I have had this screen demonstrated in my office, which has a good deal of light, and it was not necessary to cut off all the light at all.

Mr. THOMPSON. This is illustrative of the way Hiawatha was used. We used it in our school for visual instruction. Mr. Brill told his pupils what the legend meant, taught them that it was the Indian's religion; Mrs. Overstreet, another teacher, had the children write the story of Hiawatha; another teacher had them paraphrase it, change the poetry into prose, and personally I used it to take up corn in the teaching of shop language.

I had another reel made up of specially selected news topics. The news reel is a very fertile field. It comes at a cost ranging from \$1.50 to \$2 a week. It consists of about eight subjects, and these subjects are mostly all applicable to school work. For instance, I have in the other reel the royal wedding in London, and with that you might present some slides to further bring out the teaching qualities of the reel, because unless we develop the lessons of the visual presentation it becomes indifferent entertainment instead of visual instruction. We must bring out the teaching points, and our film service should go hand in hand with the textbook.

You see these are experimental machines. This machine over here, the Beacon moving-picture machine, is the only machine of its kind in America which is fitted with a short-focal lens. This Trans-Lux screen has brought about a demand for short-focal lenses which never existed before, and they are all in the experimental stage. The difference in illumination was due to the fact that the Beacon moving-picture machine was running with a 300-watt lamp; the film stereopticon was running with a 400-watt lamp, and the delineascope with a 500-watt lamp, which gives greater illumination. The delineascope which is now in use was built to team with the daylight screen and produces better results.

You all know that visual education is very important for our pupils. Eighty-five per cent of the impressions retained by hearing people come through the eye; with our deaf children almost 100 per cent of the impressions come through the eye.

Now, before when the room was darkened for projection, the child shaded his or her eyes, and it was almost impossible to get visual instruction over to any great degree, but with the Trans-Lux screen the teacher can face the children, who can read her lips as she points to the different objects in teaching history or geography.

Now, probably the quickest way to make the demonstration satisfactory would be to answer any questions that you would like to ask. In that way we can rather quickly get the consensus of what you would like to know.

Miss GERTRUDE VAN ADESTINE. I would like to ask how soon, in your opinion, these machines will be available?

Mr. THOMPSON. This machine and screen, the stereopticon and screen, are available at the present time.

The moving-picture machine is available for darkened-room projection at the present time.

Miss VAN ADESTINE. Will your moving-picture machine carry any moving-picture film?

Mr. THOMPSON. Any moving-picture film—any standard film.

Doctor TATE of Minnesota. Will you provide us with literature here, or are we to send in for it?

Mr. THOMPSON. I thought the best way to handle that would be to turn a copy of the Annals over to the different companies and let them send you literature on the subject.

This is the latest book on visual education, Motion Pictures in Education. It was sent to me by the authors day before yesterday. It will be off the press in July. It is a very valuable reference book. Motion Pictures in Education, by Don Carlos Ellis and Laura Thornborough. Published by Thomas Y. Crowell Co., New York. Now, you need not remember the address, because I am in correspondence with the author and you will be sent a circular of the book.

The magazine that will be of greatest value is the Educational Screen. It is only a dollar a year, and reviews all the pictures from the educational standpoint. Here again I will turn over to the publishers a list of the schools in the Annals, and in that way you will be saved the trouble of taking the address.

In regard to film supply, I have a letter here from Mr. Zehrung, the chairman of the International Committee of Young Men's Christian Associations. He says:

DEAR MR. THOMPSON: I have just received your letter of the 23d instant, relative to distribution of motion pictures from the industrial department.

Any organization or institution may secure films without cost, providing they assume transportation charges both ways and have their application blanks countersigned by the nearest association secretary.

One hundred and fifty of the four hundred points receiving service last month were schools, churches, public institutions, and industries.

Upon receipt of a request for service, applications will be forwarded. Upon receipt of applications properly filled out, schedules will be provided to meet the needs of the organization from one reel for one day to any number of reels for the length of time required by the organization.

I am inclosing several application blanks and mailing under separate cover a number of the folders.

The folder lists several hundred educational reels. These reels are not to be used in your Saturday evening entertainment, but are to be used in connection with your school work, because you must carry the school atmosphere along with the educational reel. For instance, if you are to present a reel on silk the latter part of the week, each teacher in the institution should previously take up silk somewhat, so as to arouse interest in the subject. Then the children when they see the reel on silk will come away and say it was a fine picture, but if you show that reel to the children on Saturday evening, when they are expecting entertainment, instead of instruction, they will come away and say, "Oh, it was so dry. We weren't interested in it." So we want to carry the educational atmosphere along with the educational reel.

Mr. Zehrung, in New York, will take up with the heads of the schools the matter of service, and his plan in my last conversation with him was to form circuits of four or five schools throughout the United States, and it would only cost the different schools the transportation of that reel from one school to another. For instance, at Trenton a circuit could be formed thus: Trenton, N. J., school; Mount Airy, Philadelphia; then Scranton, then Pittsburgh, and so on, five or six schools on a circuit.

The expense to the school in that way would be, for instance, New Jersey school, 14 cents postage from New York to Trenton. We would simply send to Mount Airy, and Mount Airy would pay the postage from Trenton to Philadelphia, which would be a very small amount.

You can list the films that you want sent for the whole year; forward the list to New York, and without further bothering about it the reels would come as you wish.

The list includes very fine subjects. Mr. Zehrung is a college man, and I have reviewed a number of pictures with him. He reviews them from the educational viewpoint.

There are many films on the market. In my correspondence this spring with a number of industrial concerns which are putting out films, I ran across great numbers of films. I attempted to review them personally, and I got some films that were nothing but wheels, wheels, wheels, till your head was dizzy. They had no human interest; no educational value.

Now, there is no use of each school spending all this postage and doing all this work when Mr. Zehrung in New York is censoring them for you and is selecting them with the needs of the school in view.

Mr. Zehrung's address is Mr. George E. Zehrung, director of motion-picture bureau, International Committee of Young Men's Christian Associations, 347 Madison Avenue, New York City.

It may be interesting to you to know that the whole educational world and the whole moving-picture world are turning their attention to the school film.

Mr. Lowe comes along and builds a beautiful theater in some town. Four or five other theaters close their doors because Mr. Lowe has built this beautiful theater. That means that in that town there is running any night one film instead of five, and that means that your film production is reduced quite materially. Then the producer of films inquires why this is, and the market having fallen off he is in search of new worlds to conquer, and so the educational field is going to reap the benefit.

The advertising companies are all very keen for advertising which will be seen by the public, and when you realize that some advertisements in the Saturday Evening Post cost several thousand dollars for one issue you get an idea of the vast sums spent on advertising. If we can grab off some of that advertising money to our advantage, it doesn't matter if the film shows a box of cocoa (with Hershey's name on it), sitting on the table, or if a stick of lumber has "Long Bell" on the end of it. The manufacturer is entitled to that little bit of advertising if he can present the production of his product from an educational standpoint. The large industrial concerns are all willing to serve us, and if we can get together and use some of these vast funds which are being spent for advertising to our benefit it is well for us to do so.

The Wright Co., of East Orange, N. J., puts out a very beautiful chart of braids. They have a representative on the road who goes to all the sewing departments in New Jersey and the eastern territory to present to the sewing rooms one of these charts of braid. She was denied that privilege in the schools of a New Jersey city. The supervisor of sewing would not even let her put up in the school sewing departments this beautiful chart of braids, which cost the company something like \$1.25 to get out. The company was paying this woman's expenses to travel all over the State, simply for the privilege of putting this chart of braid into the sewing rooms for whatever advertising might accrue to the company. Now, this isn't quite the right attitude for us to take.

As Doctor Taylor in a very able address to the teachers of our school said: "If there be a message, let us take the message, no matter who brings that message." If the advertising companies are bringing the message, let us take that message and use it for our own help and for our own progress.

If there are any other questions that I can answer, I will be glad to do so.

Doctor TATE of Minnesota. May I ask what is the price of that machine? That is very vital.

Mr. THOMPSON. The price of this outfit is far below the cost of a large moving-picture machine and gives far more service. The moving-picture machine to the right there is \$250. That is the price of all portable moving-picture machines.

The continuous film stereopticon, while very good, is limited yet as to film service. It costs about \$80.

The other machine for the projection of slides, which keys so beautifully with the daylight screen, costs \$55. The screen and the stereopticon combination cost \$80. That is a very good buy, because so many slides are available in all your States.

In the back of this new book, Motion Pictures in Education, which will be off the press the 1st of July, are given lists of sources of slides and films available in every State in the United States, where you can get films free of charge, California University, California; Colorado University, Colorado, etc. You will find in your universities large libraries of slides and films which are awaiting your request. The State of New Jersey is doing a large work along that line. There are listed in this little catalogue from the State of New Jersey 7,000 slides. Those slides are arranged in lecture sets, and with each lecture set comes a lecture written out in full. So that all you do is to send a boy down to the statehouse and he brings back your set of slides and your lecture all written out.

The State also has a large number of moving-picture films which are loaned free of charge.

A VOICE. I would like to ask, when using that projection machine with an ordinary theatrical film is it safe to stop it for the study of any portion of the film?

Mr. THOMPSON. Yes.

A VOICE. It is not heated enough to burn the film?

Mr. THOMPSON. No. There is a water cell in here [indicating], and the rays of light penetrate this water cell and the water reduces the heat so that it does not burn the film. A clear image, however, is projected.

There are coming out within the next few months four new projectors. Portable motion-picture projection has taken on great impetus in the last three or four months, because there has been discovered a process of making a heat-absorbing glass, and this heat-absorbing glass placed in front of the film retards the passage of heat, so that it makes it safe to stop. It is recognized by all lecturers and by all teachers that a very important phase in the use of films is to be able to stop on any desired picture or title. With one film on physiology I stopped on the titles, and my children got up and wrote on the board just 100 words that they did not understand from the titles of that film.

A VOICE. Can that be adjusted to take a standard film that we have to use in New York?

Mr. THOMPSON. The projector is made also for the safety standard films that you have to use in New York. Of course, you know there are certain fire laws that govern the use of portable machines. There was no way of making a study or a list of these laws, because each State has different laws.

The law of New Jersey provides that we may use any portable machine with a lamp which has a wattage less than 500°, with both flam and nonflam films. There are two kinds of films. The film which burns rapidly is called the "flam" film, and the one which burns very slowly is called the "nonflam" film.

Now, are there any other questions?

Doctor HALL. If there are no other questions, that will close our program with the exception of the resolutions, which I will ask the committee on resolutions to present. Mr. Caldwell is chairman of that committee.

Mr. THOMPSON. Just one moment. As you leave the room you will find on the two chairs by the radiator some papers showing the experiments in films that we have been making, the experimental use, and also some literature regarding the machines.

Doctor TATE, of Minnesota. Mr. President, I move you that the greetings of this convention be extended to Dr. Caroline Yale, expressing our regret at her illness.

Doctor HALL. I think that has already been done, Doctor Tate, but if not it will be attended to. We had a telegram from her and our secretary should have sent a reply to her at the opening of the meeting.

Mr. CALDWELL, of California. Mr. Chairman, I rise to offer this resolution and move its adoption by the convention:

Resolved, That this convention extend its hearty thanks to the Belleville Institution for the Deaf, to Superintendent Coughlin, and his corps of assistants for their very cordial reception of the members of the convention and their courteous and efficient efforts to provide for the comfort and entertainment of their guests during the sessions which have been held in these delightful surroundings.

Doctor TATE. I move its adoption.

Doctor HALL. Is there any objection? Without objection it is understood that the convention agrees to that resolution, so as I hear no objection the resolution is adopted.

Mr. CALDWELL (reading):

Resolved, That the convention of American Instructors of the Deaf is absolutely opposed to the employment or discharge of superintendents, principals, teachers, or any employees of schools for the deaf solely on the ground of the political affiliations of the employee.

Resolved, That such action on the part of higher officials or governing boards is distinctly detrimental to the morale of our school forces and especially to the welfare of the deaf children for whose sake our schools are founded and maintained.

Doctor HALL. Is there any objection to that? Is anyone opposed to that? Without objection then it is adopted.

Mr. CALDWELL (reading):

Whereas there are now numerous training courses for hearing teachers of the deaf, but no such courses for the training of teachers whose hearing is defective: Therefore, be it

Resolved, That this convention favors the establishment of special summer training courses for deaf teachers of the deaf, who are eligible to membership in this convention.

Doctor HALL. Without objection the resolution will be agreed to as read.

Mr. CALDWELL (reading):

Whereas the convention of American instructors of the deaf, representing State schools for the deaf, has been informed that the motor-licensing authorities of several States have adopted rules that exclude deaf applicants from the examinations required for the issuance of automobile licenses on the ground that deafness incapacitates them from safely driving motor vehicles; and

Whereas our intimate knowledge of the psychology of deafness and our practical experience of its demonstration in hundreds of cases prove to us that, if anything, a deaf driver is less liable to accidents than one who depends upon hearing rather than upon sight; and

Whereas of the many deaf drivers known to our members, the number who have been involved in accidents attributable to deafness has been wholly negligible and the number of those who have been in accidents of any description has been far less in proportion than of drivers known to us to be in full possession of their hearing; and

Whereas humanity as well as duty would prompt us to oppose any liberty of action which we believe would endanger the life or limb of those who have been under our care and instruction: Therefore, be it

Resolved, That we emphatically protest against any restriction of issue of motor licenses based solely upon deafness.

Doctor HALL. Without objection the resolution is adopted.

Have you any further resolutions, Mr. Caldwell?

Mr. CALDWELL. That is all.

Doctor HALL. Miss McDaniel, have you any further resolutions to present from the committee?

Miss NETTIE MCDANIEL, of Georgia. I ask that the following resolutions be passed upon:

First.—That a vote of thanks be extended to Miss Catherine Ford, supervising teacher of the Ontario school and to Miss Verne J. Smith, Miss Gladys Bradley, Miss Ethel Nurse, and Mr. E. B. Lally, for the excellent demonstration work with their classes each day before the morning sessions of the convention.

And further that the convention express appreciation for the discussion on reading and geography conducted by Mr. George Stewart, and for the demonstration of auricular work by Dr. E. L. LaCrosse.

Second.—That the thanks of this convention be tendered the Rotary and Kiwanis Clubs and the Masons of the city for entertainment given the members of the convention, and, also, the citizens of Belleville who were responsible for the beautiful auto rides on Tuesday and Friday afternoons, and the musicians who furnished the musical program on Wednesday evening.

Third.—That the convention express its appreciation to the interpreters for their services in behalf of the deaf members of the convention.

Fourth.—That thanks be offered the newspapers that have furnished daily papers for the members of the convention. These are the New York Tribune, New York Sun, New York Herald, Detroit Free Press, Philadelphia Ledger, Springfield Enterprise, and Atlanta Constitution.

And further that expressions of appreciation be given the Belleville Ontario and Belleville Intelligencer for their reports of the proceedings of the convention.

Doctor HALL. You have heard the resolution; what is your wish?

Mr. H. E. DAY, of Washington, D. C. I move their adoption.

(The motion was seconded, put, and carried.)

(The resolutions were unanimously adopted by the convention.)

Doctor HALL. Have you any further resolutions, Miss Ford?

Miss Catherine FORD, of the Ontario school. I offer the following resolution:

That the hearty thanks of this convention be hereby tendered to the retiring president, Doctor Hall, for his long and most efficient services as president, and we desire to express to him our grateful appreciation of the uniform courtesy, dignity, and impartiality that have always characterized his discharge of the onerous responsibilities devolving upon him as presiding officer.

That our thanks also be tendered to all of the officers for the very efficient manner in which they have severally discharged their duties and for the hearty and cordial way in which they have cooperated in their efforts to promote the best interests of this convention.

Doctor DOBYNS, of Arkansas. I move that that resolution be adopted by a rising vote.

(The convention rose with applause.)

Doctor HALL. I thank you very much. I have here a message from the board of education of Belleville, giving minutes, evidently, from their records:

BOARD OF EDUCATION,
Belleville, June 29, 1923.

Moved by Col. W. N. Ponton, seconded by J. Elliott, that the board of education of the city of Belleville extend cordial greetings to the convention of instructors of the deaf now in session in Belleville, and heartily commend the public spirited and admirable work in which they are engaged and to which they are devoting their life and energy. The reports of their proceedings and the addresses delivered by eminent educationists at the Ontario School for the Deaf have been most informing and inspiring. Internationally, we express our appreciation of the choice of our efficient and progressive Belleville school as the place of meeting and radiating center of their thought and labor, and we extend to these representative citizens of Scotland, England, the United States, and all other countries that have sent delegates, a hearty welcome to Canada, and express the earnest hope that they may soon again return to Belleville to renew the happy associations made with our citizens and their colleagues.

(Carried unanimously.)

I think we might reply to that by a message of thanks for their action, and I will entertain a motion for a reply from our secretary, conveying our thanks for the minutes which they have passed.

Doctor DOBYNS of Arkansas. I make such a motion.

(The motion was seconded, put, and carried.)

Doctor HALL. Is there any further business before the convention?

Doctor DOBYNS. Mr. President, I have not heard in any of these resolutions anything referring to this matter, but it might be—I don't think it is going too far to pass the resolution that I want to offer.

We have been uniquely served here by the high-school boys of this city at our tables in the dining room, and I want to offer a resolution that our thanks are due to those bright, young, attentive fellows for taking care of us in that capacity.

(The motion was seconded, put, and carried.)

Dr. J. SCHUYLER LONG. The National Association of the Deaf meets in Atlanta August 13 to 15. We will be glad to have any of you come down there and attend our convention, take part in our meetings, and visit with us.

Doctor HALL. I hope you have in your hands the program of the morning. I think it will be very appropriate to sing the three verses at the end of our program. Let us all rise and sing these three verses.

God save our gracious King!
 Long live our noble King!
 God save the King!
 Send him victorious,
 Happy and glorious,
 Long to reign over us,
 God save the King!

My country, 'tis of thee,
 Sweet land of liberty,
 Of thee I sing;
 Land where my fathers died!
 Land of the Pilgrims' pride!
 From every mountain side,
 Let freedom ring!

Two empires by the sea,
 Two nations great and free,
 One anthem raise,
 One race of ancient fame,
 One tongue, one faith, we claim,
 One God whose glorious name
 We love and praise.

Doctor HALL. I declare the twenty-third convention adjourned.

NECROLOGY.

ISABELLA CHENAULT ARGO.

Upon the death of Dr. W. K. Argo, superintendent of the Colorado School for the Deaf and the Blind, it was but natural that Mrs. Isabella Chenault Argo, his wife, who had been so closely associated with him in his work, should be called upon to take his place. This was not to be for long, however, for before a year of her administration had elapsed she passed away on March 6, 1922.

Mrs. Argo came from a long line of ancestors on both sides, who had been prominent in the early history of Virginia, South Carolina, and Kentucky. Her father, Prof. William Chenault, was a noted teacher of law, and was at one time dean of the Kentucky University Law School. Upon her marriage to Dr. W. K. Argo she went to the Kentucky school, and from that time was intimately associated with the deaf. She was at one time a teacher in the Kentucky school, and later in the Colorado school. For several years before she became superintendent she was matron in the Colorado school.

Mrs. Argo was a prominent member of the Presbyterian Church and was widely known in social circles, being a member of the Daughters of the American Revolution, Colonial Dames, and the Daughters of the War of 1812.

Mrs. Argo's hospitality was unbounded, and her kindness and thoughtfulness of others won for her a host of friends.

WILLIAM KAVANAUGH ARGO.

William Kavanaugh Argo, superintendent of the Colorado School for the Deaf and the Blind for nearly 23 years, was born in Garrard County, Ky., October 8, 1857, and died April 14, 1921.

Doctor Argo spent his whole life in educational work for the deaf, and he came naturally by his love for the profession, because his parents were both deaf.

After Doctor Argo was graduated from Center College, Ky., in 1879, from which institution he later received his M. A. and the honorary degree of LL. D., he became a teacher in the Kentucky School for the Deaf.

It was only a short time until the superintendent of that school resigned, and the board, recognizing Doctor Argo's ability, appointed him acting superintendent and later superintendent, where he remained the active head until 1894, resigning on account of ill health.

When Doctor Argo's health failed he moved to Colorado, where, in a remarkably short time, he was advanced to the position of superintendent of the Colorado School for the Deaf and the Blind. This position he held for the last 23 years of his life, and the history of the Colorado School for the Deaf and the Blind for this period was the personal history of Doctor Argo's life.

Doctor Argo was recognized as a leader in the educational field of teaching the deaf and the blind, and his death caused a serious loss to the profession.

When Doctor Argo became superintendent, the Colorado school was poorly equipped both in land and buildings. The area of the land belonging to the school was increased more than twentyfold, and the buildings which were caused to be erected during his administration will stand as physical monuments, testimonials of the work, patience, and energy spent in bringing the Colorado school to the high standard which it enjoys.

The greatest memorials, however, which Doctor Argo erected to himself are to be found in the hearts, lives, and characters of the hundreds of pupils who passed under his influence.

The only words we know which might adequately describe him are inscribed in one of the alcoves in the Congressional Library in Washington. These words are:

"As one lamp lights another nor grows less,
So nobleness enkindleth nobleness."

And the lamp which burned in Doctor Argo's heart has lighted other lamps in a multitude of other hearts, lamps which will not be extinguished in many generations.

KATHARINE E. BARRY.

After spending nearly her whole life in the service of teaching the deaf, Miss Katharine E. Barry passed away March 18, 1922, after an illness of about three weeks.

Miss Barry's life was unique in that it was so completely a life of service for others.

She was born in Rhode Island and began teaching when she was very young, and was permitted to continue in active service up to her final illness.

She began her work with the deaf in the Michigan school, and later taught in the Minnesota school and at Mount Airy, Pa. She was also principal of the Cleveland day school at one time. She spent the last 17 years of her life as head teacher in the department for the deaf of the Colorado School for the Deaf and the Blind.

Early in her career as a teacher Miss Barry recognized the absolute necessity for the deaf to have a working command of everyday language and the difficulty by which this part of the pupil's education was accomplished. Ingenious woman that she was, she set about trying various devices to discover the easiest and best way of teaching the deaf to express their thoughts in the natural order of the English language.

"The Five-Slate System," which, as she said was "not a method" of teaching language, but a "system" which would aid materially in teaching language to deaf children, if used properly by persons who thoroughly understood it, was an outgrowth of these experiments.

The linking of Miss Barry's name with "The Five-Slate System" which was copyrighted in 1899 brought her into national prominence among educators of the deaf and she was recognized as one of the most eminent and successful teachers of language to deaf children.

Miss Barry's loyalty to the schools with which she was connected and the enthusiasm with which she devoted herself to the cause to which she had dedicated her life were unexcelled.

Miss Barry's influence was not only felt by the pupils with whom she came in contact, but she was a great inspiration to many a struggling young teacher whom she was always willing to help over the stony places of her teaching career.

The profession can ill afford to lose such persons as Miss Barry.

ALEXANDER GRAHAM BELL.

The death of Dr. Alexander Graham Bell on August 2, 1922, at his summer estate at Beinn Breagh, Nova Scotia, marked the passing from the ranks of educators of the deaf of one of its commanding characters. Inventor, scientist, teacher, his accomplishments in each of these rôles made him an outstanding figure. It is no small comfort to know that his greatest contribution to civilization, the telephone, was virtually the outcome of his studies as a teacher of the deaf. As he began his career deeply concerned in the welfare of the deaf, so he remained to the end, ever alert to what he sincerely thought would best serve their interests. He was one of the eternal builders; where others conquered by devastation, he conquered by the genius of construction. As such, posterity will come to revere him in company with the few great benefactors of history.

WILLIAM NATHANIEL BURT.

At noon, October 17, 1921, William Nathaniel Burt, superintendent of the Western Pennsylvania Institution for the Deaf, quietly passed into the eternal peace of his reward. He gave of his strength, of his life, so unobtrusively that few felt the great value of the work he did. Doctor Burt guided the destinies of the school for over 32 years, a period during which he cared for those in his charge as would a father over the affairs of his household. Doctor Burt was born in Vernon, Ind., January 27, 1846. He was reared and educated in all the simplicity of village and country life, yet withal in an environment of culture and refinement which had a substantial influence upon his after life. After being graduated from Hanover College, Indiana, in 1867, Doctor Burt accepted a position as teacher in the Indiana School for the Deaf. Here the first few years of his work were spent in an atmosphere of cultural and educational activity. He had as his associates such men as Dr. Thomas MacIntire, P. S. Gillett, W. H. Latham, J. C. Gordon, W. A. Caldwell, Noble McKee, all of whom rose to distinction in the profession.

After 22 years of strenuous endeavor at the Indiana school, Doctor Burt accepted the superintendency of the western Pennsylvania school, which then was yet in the formative period. There was much to be done to bring it to a higher state of efficiency. Reorganization was necessary in all departments. With admirable tact and fine judgment he met every difficulty successfully, and from that time throughout the entire term of his administration, growth and development were continuous and steady. Nearly all the buildings now on the grounds were erected during his incumbency and the adaptability to their requirements was largely due to his comprehensive recommendations.

Vocational training was one of the elements in the education of the deaf nearest his heart and he extended these facilities in his school to the utmost of the support permitted him. He was one of the pioneers in advocating specific training along this line for girls as well as for boys.

LESLIE K. CLARK.

Leslie K. Clark died November, 1920. He had been instructor in cabinet-making and woodworking in the Rhode Island Institute since 1911. He was a most efficient instructor and a helpful man in the school, beloved by pupils and associate workers.

REBECCA E. DAVIS.

Miss Rebecca E. Davis died July 28, 1923. She was connected with the Tennessee School for the Deaf during a period of 40 years, serving first as matron of girls and for a longer period as teacher in the manual department. In 1885 she organized the first Sunday-school class for the deaf in the South. Although "Miss Betty," as she was lovingly called, had been an invalid for a number of years, her class has remained imbued with her spirit, and the lives of those with whom she worked so faithfully stand as monuments to her untiring efforts for the deaf.

EVA A. DOLD.

Mrs. Eva A. Dold, a tried teacher in the Kansas school, passed away July 24, 1920, after a number of years of faithful service. The deeply imprinted affection in which Mrs. Dold was held by all with whom she came in contact will stand as a lasting tribute to her memory.

JONATHAN HOLBROOK EDDY.

Jonathan Holbrook Eddy, M. A., for 44 years, from 1878 until 1922, a teacher of the deaf, died at his home in Little Rock, Ark., on Monday night, January 8, 1923. Mr. Eddy was born in Chautauqua, N. Y., and at the age of 7 lost his hearing from a fever. When he was 12 years old he entered the Fanwood school. He had already learned to read and write, so it was but a short time until he proved his superiority in all branches of study. He was trained under the late Dr. Isaac Peet. It was while pursuing a postgraduate course with Doctor Peet that he was elected a teacher in a new school in Rome, N. Y., in 1878. Two years later he married Hattie Roe, who was a teacher in the Rome school.

It is said that Mr. Eddy was the last of the four intellectual giants who had so much to do with the upbuilding of the Rome school, the others being Alfonso Johnson, F. L. Seliny, and William Martin Chamberlain, all of whom were brilliant exponents of the incomparable combined system.

Mr. Eddy was a Christian man. He was a courteous gentleman. He was a scholar. He was a student of books and of men and of events. He was an example for young men. He was industrious and painstaking. He was a teacher of the highest order. He was a citizen in the broadest and highest meaning of that word. He was deaf physically; mentally and spiritually he could appreciate all the beautiful harmonies. He was a success.

EDWARD ALLEN FAY.

It is with great sorrow that the faculty of Gallaudet College records the death of Dr. E. A. Fay, for more than 50 years one of its most valued members and for 35 years its vice president.

At the time of his death Doctor Fay was the foremost authority in the world on the education of the deaf. As the editor of the *Annals* for a full half a century innumerable articles appeared from his pen showing his broad grasp of the subject.

Although his work in Gallaudet College was confined for the most part to the teaching of French and German, he published a Concordance of the Divine Comedy of Dante, which brought him recognition as one of the leading Italian scholars of his day, and his great work on Marriages of the Deaf is still cited by those interested in heredity and eugenics.

He was one of the founders of the Dante Society and was a member of other societies devoted to research and the dissemination of knowledge.

As a teacher he was an inspiration to all his students who always gave him their best efforts.

His decisions were characterized by his unfailing sense of justice, and his advice was probably more highly valued than that of any other member of the faculty.

As a friend he was sympathetic, unselfish, and helpful, inspiring deep affection in all who knew him.

His character was in the highest degree admirable and the influence of his life upon the college in general, students and faculty alike, can not be overestimated.

DR. JOSIAH SETTLE GRAVES.

Early in the morning of Saturday, February 17, 1923, Dr. Josiah Settle Graves, resident superintendent of the Negro School for the Deaf and the Blind, Alabama, was called from the scenes of his earthly sojourn, to that "undiscovered country from whose bourne no traveler returns." After more than two score years spent in striving for the betterment of those who were handicapped as he had been, he laid down the implements of toil here and passed on to give an accounting for the talents which had been entrusted to his keeping. We have no fear but that he has already heard the hard-earned "Well done" from his Master's lips.

Doctor Graves began his life work as teacher of the blind 46 years ago, 41 of which were spent in Alabama and 31 as resident superintendent of the Negro School for the Deaf and the Blind. His duties in this position included not only those of executive, but of teacher and field officer as well, and while he was efficient and faithful in the performance of every duty, it was as field officer that his work was particularly helpful to the deaf and the blind of Alabama. Many of the children in our schools to-day are here because of his unceasing efforts to locate them at their homes and his persistence in persuading unwilling parents to give their offspring the advantages of an education which the State had provided for them.

For five years or more Doctor Graves had not been in robust health. Much of this time he was confined to his room and often he was up trying to meet the demands of his task when he should have been in bed. For the last few months, however, there seemed to be marked improvement in his physical condition. The last entire day of his life was apparently the best he had passed for many weeks, but early that last morning, there came the sudden, silent summons, and silently, without a protest, he answered the call.

HUGH M. HARBERT.

Mr. Hugh M. Harbert was born at Kokomo, Ind., August 5, 1853, and died December 7, 1922. At the early age of 11 he lost his hearing through spinal meningitis after he had obtained a fair command of the English language; but the main burden of securing an education fell upon his own shoulders. This was not quite so great a task to him as one might think, because from boyhood he was an incessant reader of not only the current events and novels of the day, but also of the best standard literature.

At the age of 15 Mr. Harbert entered the Kansas School for the Deaf, and because of his unusual command of language he was asked to assist in teaching. While at the Kansas school he took up the printer's trade, which he followed throughout his life.

Just 44 years before Mr. Harbert's death he became connected with the Colorado school. He took charge of the printing office and became editor of *The Index*.

Mr. Harbert was not only instructor of printing, but also taught in the literary department. For a short period of time he was principal of the school.

As the duties of the printer became more numerous with the growth of the school, he dropped his literary teaching and devoted all of his time to the printing office. As editor of *The Index* he was a conservative, sane writer.

Only a very few years prior to his death, a stroke of paralysis caused him to retire from active service, but at that time he was made editor emeritus. He never lost interest in the work which had demanded his attention for so long a time.

Mr. Harbert was one of those modest men who never thrust himself upon anyone, yet he was extremely well informed, and was considered a very brilliant man. During his long residence in Colorado Springs he made many friends who grieve at his passing.

TOW HELLBERG.

Tow Hellberg, a graduate of the Lexington Avenue School, New York City, died July 4, 1921.

He had been connected with the Rhode Island school for about four years, first as supervisor of the boys. After Mr. Clark's death in November, 1920, he was appointed instructor in woodworking.

He was ambitious to succeed and gave great promise, but in March his fatal illness developed and he was obliged to give up his position.

Tow Hellberg was a fine example for the deaf boys under him. They loved him and followed his leadership willingly.

JOHN BURTON HOTCHKISS.

On November 3, 1922, Gallaudet College lost a most devoted, accomplished, and beloved friend. The last of the first four graduates passed away.

Dr. John Burton Hotchkiss served the college, from which he was graduated in 1869, successively as tutor, instructor, assistant professor, and professor for 53 years. He was a splendid teacher, a loyal friend, and an admirable and good man.

To the students, Doctor Hotchkiss was always a safe and willing guide. To them he gave bountifully of his time, his high talents, and his company. To him were the great numbers of graduates and former students of the college very closely and tenderly attached. In him they found a faithful friend full of optimism and encouragement. No one was more familiar with their lives and fortunes after graduation than he, nor has any one kept more in touch with them. He represented the best type of themselves.

Doctor Hotchkiss was a master of the English language and of the sign language. Of the correct use and beauty of both he was, by precept and example, an ardent and effective exponent.

In the classroom, upon the platform, in the pulpit, in the private walks of life, and with the pen he personified the highest attributes of a brilliant and perfect gentleman, a widely-read scholar, and a Christian.

His characteristic kindness and forgetfulness of self, his tolerance and good will, his encouragement, and hopefulness toward all in their studies and other tasks of college life and the broader life outside are well known.

The pen which he wielded fluently and beautifully for so long a time was a source of great delight to many. His columns in the student publication since its beginning 30 years ago, and his voluminous private correspondence were links that attached the alumni and former students to their alma mater.

Around Doctor Hotchkiss will grow that legend and tradition and love that adhere only to a loyal friend who goes to a well-deserved rest after a long and successful life of service to the highest Christian ideals and to one's fellow men.

SIBELLE DE FOREST KING.

Sibelle de Forest King was born in St. John, New Brunswick, Canada, June 24, 1874. Her father was Stephen J. King, who at the time of his death in 1897 had been post-office inspector of New Brunswick for a number of years. Miss King's early life was spent in St. John where she received her education in the public schools. In 1894 she entered the normal class at the Northampton School. Shortly afterwards she accepted a position at the Mackay Institute in Montreal, where she taught successfully until 1899. Later she taught also at the North Carolina School and the Mount Airy School. From 1908 to 1918 she was an instructor in the New York institution, after which she retired on a pension. The latter years of her life were spent at Morganton, N. C., where she died February 22, 1922.

WILLIAM CROOKS McCLURE.

William Crooks McClure, superintendent of the Missouri school, passed away July 13, 1922, in the full flush of manhood, in the prime of accomplishment. Although at the time of his death only 30 years old, he had been in the profession long enough for his merits to have brought him to the forefront and given him the leadership of an old and great school.

He was born in Danville, Ky., November 9, 1891. Finishing a preparatory course in a private school in Danville, he studied at Center College from which he was graduated in 1912. After a summer of European travel, he entered the normal department of Gallaudet College in preparation for a career as teacher of the deaf. He began his lifework as a teacher in the Missouri school, where he soon won for himself an enviable position in the love and esteem of pupils and colleagues. He left the profession only to offer his services to his country, enlisting in the Navy where he rose to the rank of ensign before the close of a year. At the end of the war, young McClure returned to Fulton, but in 1920 he was called to take charge of the North Dakota school as superintendent. There, as in Fulton, he demonstrated his striking abilities and won all hearts by his unflinching tact and kindness.

The following year Mr. McClure returned to the Missouri school, this time as its head. In a remarkably short time, the school was rejuvenated. He lengthened the school time permitted a deaf child by two years, and appointed committees to revise the course of study, the defects of which he had observed as a teacher. He had plans marked out for five years in advance. A new gymnasium, better shop and school equipment, an improved athletic field, a larger attendance, and more thorough training and education of teachers; all were given consideration.

He was a man of brilliance, integrity, and graciousness. His life was a sermon.

HOWARD JOHN McDERMID.

Howard J. McDermid, 11 years superintendent and principal of the Manitoba School for the Deaf, was drowned at Fox Lake, Wade, Ontario, August 7, 1920, aged 35.

He was the son of Duncan Wendell McDermid, who was superintendent and principal of the Manitoba school 1890 to 1909, and of Mary Lorenzen McDermid, a teacher at the Ontario School for the Deaf before her marriage.

After Doctor McDermid graduated from the Manitoba Medical College in 1907, he practiced his profession for a time at the Winnipeg General Hospital and then at Russell, Manitoba, until the death of his father, whom he succeeded.

The present buildings of the Manitoba school were planned along ideas of Doctor McDermid, and it was largely through his effort that the new school was built.

Following is a tribute from a close personal friend of Doctor McDermid:

"In Doctor McDermid's death this city and the Province have sustained an irreparable loss. He was a man of the highest type, brilliant mind, and varied gifts. He devoted himself whole-heartedly to the duties and noble opportunities of the responsible and important position he filled, and for which he had exceptional qualifications. In that position he succeeded his father, a man of enviable standing, whom he resembled to a marked degree. He excelled in everything he undertook, and, as a practicing physician, would have gained eminence in his profession. He preferred, however, to follow the example of his father and take up as his life work the education and training of deaf children. By them his memory will be cherished, as is that of his father, by those children who were under him. In the very prime of a life of the greatest usefulness he has been suddenly taken away. His untimely death is a misfortune to the entire community and will be long mourned by a large circle of personal friends."

FRANCIS McKINLEY.

Miss Francis McKinley came to the California school in 1921, highly recommended by Doctor Crouter, of the Mount Airy school. She passed away November 16 of the same year after a short illness. During her brief service, however, she won the esteem of all by her gentle and refined manners and her devotion to her work.

She was born in Ohio and in early life moved to Kansas, where she began teaching in the Kansas school. After serving there for 12 years she taught in the Iowa school for a year and went to the South Dakota school, where, in a few years, she became principal. She remained there for 15 years and then spent a year at the Mount Airy school.

JULIA McNAIRY.

Julia, daughter of Mr. J. D. McNairy, of Greensboro, N. C., passed away on Sunday evening, March 19, 1922, at a private hospital in Philadelphia, Pa., after an operation for mastoiditis.

Miss McNairy had been a great sufferer during her severe illness, but hopes were entertained up to the very last that she would recover.

Miss McNairy was a superior teacher. She did excellent work with her pupils and possessed the happy faculty of enlisting their personal affections to an unusual degree. Before serving in the Pennsylvania institution she had taught with much success in the North Carolina and Rhode Island schools. She was universally respected for her sterling virtues.

SARAH HARVEY PORTER.

Sarah Harvey Porter began her labors in the Columbia Institution in 1884 as a teacher in the Kendall School. She had had some previous experience in a school for hearing children and had taught for a year in the Clarke School for the Deaf. She entered upon her work in Washington with enthusiasm and soon developed exceptional talent as a teacher of language to the deaf.

After the normal department was established at Gallaudet College, Miss Porter took part in the instruction of its students. Here she showed so much interest and produced such good results that it seemed best for her to give her time exclusively to that work. Making a special study of the mind of the deaf child after having been trained in the fundamentals of psychology by her master and friend, William James, familiar with the best literature of all ages, keenly interested in public affairs, sympathetic, appreciative, and stimulating, she broadened the mental and spiritual outlook of her students and led them into ways of thought and action, which, if they possessed the proper natural qualifications, could not fail to make them successful teachers of the deaf.

Miss Porter was an able and brilliant writer, as her many articles in the *Annals* and her *Life* and *Times* of Anne Royall prove. To our deep personal sorrow at the departure of a valued associate and beloved friend is added our sense of loss that we suffer in common with the whole profession in the noncompletion of her magnum opus on the psychology of the deaf child, for which during the year before her death she had collected the material and worked out the plan.

FRANK READ, JR.

Frank Read, jr., was born August 12, 1866, and attended public schools in Jacksonville, Ill., later entering Illinois College, from which he was graduated in 1888. Soon after this he became a supervisor at the Illinois school, but in a short time joined the teaching force, remaining in that position until 1912, when he was appointed superintendent of the Oklahoma school at Sulphur. During his three years' incumbency he made a record of which the Sulphur Democrat declared "any man might be proud." The site of the school was changed and four new buildings erected, making the first really permanent home for the school. A new dining room and kitchen were secured, the sewer system overhauled, and other improvements made.

From Oklahoma, Mr. Read went, in 1915, to North Dakota to head the school at Devils Lake. Here he had almost completed five years of service when claimed by death, July 4, 1920. In North Dakota, as in other places, Mr. Read made many friends and proved himself an able administrator.

In his quiet, earnest, and above all, unselfish way, he was throughout his life a follower of Him who said, "By their fruits ye shall know them." As one thinks of the many deaf children who have come under his influence, the works he has left behind, and the countless friends who have felt the cheer of his optimism, it can fittingly be said of him that "being dead he yet speaketh."

WARREN ROBINSON.

Dr. Warren Robinson was born in 1869 and died January 1, 1921.

Doctor Robinson was a member of the institutional family at the Wisconsin school for nearly half a century, either as student or member of the faculty.

His early life was spent among the beautiful hills of old Iowa County, where he was a member of a very noted and distinguished family.

No one ever took a keener interest in the deaf than did Mr. Robinson, both as teacher and friendly adviser to those who needed his help. He loved the old State school and was deeply interested in every department of its work.

No one ever sympathized with deaf boys and girls more than he, and no one was better able to assist them to understand their many problems of life.

He was educated at the Wisconsin school and at Gallaudet College, and in 1884 began his career as a teacher. He taught continuously in the Wisconsin school for more than 36 years, giving up his work only because of declining health.

Doctor Robinson was especially interested in the advancement of industrial education among the deaf, for which he was well known in the profession.

One of his recent achievements was a collection of a library of the literary productions of the deaf which was practically completed shortly before his death. It is the only collection of its kind ever gathered into an institutional library.

GEORGE THOMAS SCHOOLFIELD.

Born in Bracken County, Ky., May 4, 1841; pupil in the Indiana School for the Deaf from 1853 to 1856, and a pupil in the Kentucky school from 1856 to 1861.

He was engaged in farming from 1861 until 1866, and in the latter year was appointed supervisor and teacher in the Kentucky school. He continued as supervisor until 1887 and as teacher until 1918 when he retired from the profession after a service of 52 years.

Professor Schoolfield was president of the Kentucky Association of the Deaf, 1910 to 1916.

He died at the home of his daughter in Memphis, Tenn., November 7, 1920.

DR. CHARLES S. TURNBULL.

Inheriting an abiding interest in his work from his father, Charles S. Turnbull, noted physician, permitted no opportunity of manifesting it to go by. Governor Stuart, of Pennsylvania, appointed him to the board of trustees in 1907 of the Pennsylvania Home for the Training in Speech of Deaf Children. He was made its secretary, and he held that post until February, 1918, when he died suddenly after only three days' illness.

MARGARET WATKINS.

Miss Margaret Watkins, for 33 years a teacher in the Iowa school, died on January 28, 1923. Death was due to heart trouble, after two days' illness.

Miss Watkins was born in Pennsylvania in 1860 and came to Iowa when her father, who was a minister of the Welsh Presbyterian Church, came to take charge of a pastorate at Iowa City. He died in 1878, leaving a family of 11 children. Miss Watkins, who was only 18, having just entered the university, was obliged to give up her studies and become a breadwinner. She took up teaching in the public schools and continued for nine years.

Her chum had married a teacher in a school for the deaf, and through her Miss Watkins became interested in the work and was induced to take it up. She began teaching in the Nebraska school in 1887. In 1889 Mr. G. L. Wyckoff, noticing the excellence of her work, induced her to come to Iowa, and she soon rose to the position of head teacher of the intermediate manual department, where her initiative and executive ability found full scope.

As a teacher she was unusually successful. She understood the psychology of the child mind, especially that of the deaf child. She originated the sequence method and many other devices in the teaching of backward children, in which department of the work she had no superior.

A few years ago she was induced to take up oral work and at the time of her death was teaching a seventh-grade oral class.

In addition to her school work she acted as librarian of the school, having charge of over 7,000 volumes, including the 3,000 books in the supplementary library at the schoolhouse.

She was essentially a worker and observed no limitation of hours. While there was any work to do she was ready for it all the time.

During her early life her earnings went to the support and education of her orphaned brothers and sisters, and when they had grown, to maturity she supported her mother. She survived the latter only two years.

KATE DELANO WILLIAMS.

Miss Kate Delano Williams, a dearly beloved teacher in the Horace Mann School until her retirement in 1921, died at her home in Dedham on March 19, 1923, after a brief illness.

Miss Williams entered the school a very young girl, fresh from the girls' high school, and for 47 years she gave to her profession such loving, faithful, enlightened and inspiring service as only those who are teachers by the grace of God can give.

She was a departmental teacher of English and to her task she brought an ideal equipment; for to scholarly knowledge and artistic appreciation of literature she added a most unusual analytic perception of the structure of our language—an invaluable asset for a teacher of the deaf—and most important of all, she spoke her mother-tongue with beautiful fluency and accuracy.

To see her teach a lesson was to watch an artist create a masterpiece. Like other true artists she possessed the infinite capacity for taking pains. She always made sure of her foundation and then she built up, little by little, until every child, according to his ability, had something new to carry away with him. No matter what the particular subject of the lesson might be—definition, verb-form, humble little sentence, or classic poem—when the lesson ended every child could give back in good English the essential thought in such fashion as convinced the teacher's critical ears that she had succeeded in making her point. Therein lay the secret of her power; to every child she gave a happy sense of mastery. Most teachers of the deaf are faithful, and many can rouse interest and enthusiasm, but only the few can give to every pupil, every day, a steady conviction of accomplishment, and of these rare few was Kate Delano Williams.

BELLE YOUNG.

Miss Belle Young, a teacher in the State school for the deaf, Columbus, Ohio, for a great many years, died just before the close of school in 1923. Her work was in the intermediate grades and she taught an oral class. She was ever interested in the deaf and gave the best she had for them.

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